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ABSTRACT

This document consists of the 24 papers delivered at a conference that had five workshops examining various dimensions of the social and occupational transition of young people. The papers are arranged by workshop/session. A summary report precedes the other papers presented during a session. The papers in the session on perspectives on systems, institutions, and change are as follows: "Summary Report" (Karl Ulrich Mayer); "Understanding Change in Youth Labour Markets" (David Ashton); "Different Systems of Vocational Training and Transition from School to Career" (Hans-Peter Blossfeld); "Tracks and Pathways" (David Raffe); "On the Interest of Longitudinal Approaches in the Analysis of Vocational Transitions" (Jose Rose); and "Education and Training in Transition" (Karen Schober). Session 2 on labor market itineraries of secondary school leavers contains the following: "Summary Report" (Jose Rose); "Entry into Employment of Young People Who Have Successfully Completed Their Secondary Technical and Vocational Education in French-Speaking Brabant and Charleroi" (Simon Cabitsis, Adinda Vanheerswynghele); "Explaining the Differences in the Occupational Insertion of Educationally Lesser Qualified Young People" (Didier Demaziere, Brigitte Monfroy); "Transition to the Labour Market of Vocational and Technical Secondary School Leavers" (Jan Denys); "Complex Training Routes and the Results of Insertion among Young People" (Jordi Planas); "Time Spent in Education and Lack of Job Security" (Simon Cabitsis, Nouria Ouali, Andrea Rea); and "Analysis of the Use of Government Integration Measures Made by Young People Leaving Secondary Education" (Thomas Couppie, Patrick Werquin). The session on transitions in youth--social and household dimensions--includes these papers: "Summary Report" (Alessandro Cavalli); "Transition Behaviour and Career Outcomes in England and Germany" (Walter R. Heinz); "French Women Entering the Labour Process and Setting Up Households in the 1980's" (Annick Kieffer, Catherine Marry); "From Youth to Adulthood Project" (Matti Vesa Volanen); and "Main Features

of the Structure of the Working Population" (Luis M. Larringa, Ascen M. F. de Landa). Session 4 on the process and consequences of education differentiation contains the following: "Summary Report" (Walter Mueller); "Transition from Education to the Labour Market for Young People in Sweden" (Karin Arvemo-Notstrand, Ingegerd Berggren); "Secondary Technical Education Qualifications" (Marcelo Ossandon, Pol Dupont); "Transition from School to Work" (Wim Groot, Hans Rutjes); "Returns to Education" (Richard Breen, Damian F. Hannan); and "Competition on the Labour Market" (Rolf van der Velden, Lex Borghans). Session 5 on labor market itineraries of higher education graduates consists of the following: "Summary Report" (Francois Pottier); "'How Does a Changing Labour Market Affect the Transition from Higher Education to Work?'" (Clara Aase Arnesen, Jane Baekken, Terje Naess); "Training and Employment in Hospitals" (Mateo Alaluf, Adinda Vanheerswyngheles); "Family Social Status and Paths of Youths in the Systems of Education and on the Labour Market" (Lea Battistoni); and "Training and Occupational Routes of New University Graduates in Catalonia" (Josep M. Masjuan, Helena Troiano, Jesus Vivas, Miguel Zaldivar). (YLB)

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The Determinants of Transitions in Youth

Papers from the
conference
organized by
the ESF Network on
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CEDEFOP and
**GRET (Universitat
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Barcelona)**

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of Transitions in Youth**

**Papers from the conference
organized by the
ESF Network on Transitions in Youth,
CEDEFOP and
GRET (Universitat Autònoma de Barcelona)**

Barcelona
20-21 September 1993

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Introduction

This document consists of the papers delivered at the conference organized on 20 and 21 September 1993 in Barcelona on Transitions in Youth at the initiative of the "European Science Foundation Network on Transitions in Youth"¹ with the support of the Research Group on Education and Labour (GRET) at the Institute of Educational Sciences from the Universitat Autònoma de Barcelona and CEDEFOP.

Some fifty experts took part in the meeting: researchers from 13 European countries, experts from OECD, ILO and CEDEFOP and representatives of the social partners on CEDEFOP's Management Board.

This was the first international meeting of the Network which has the long-term goal to advance theoretical understanding of transitions in youth, and especially, of the relationships between education/training and the labour market, through the comparative analysis of regular and longitudinal surveys of transitions. Thus the Network aims to promote links between the social scientists from different European countries whose interests require comparative data or who work on national surveys providing data which may be used for comparative purposes. For CEDEFOP, which has been interested from the outset in the Network and its activities, the conference was a means of reflecting on "exclusion" phenomena and possible support of analyses of integration in understanding exclusion processes and mechanisms. It was also an opportunity to examine both theoretical and political aspects of the issues with the aid of the social partners.

The conference had five workshops, each coordinated by a rapporteur and examining various dimensions of the social and occupational transition of young people:

- Perspectives on systems, institutions and changes
- Labour market itineraries of secondary school-leavers
- Transitions in youth: Social and household dimensions
- The process and consequences of educational differentiation
- Labour market itineraries of higher education graduates

The papers and ensuing discussions allowed fruitful comparison of approaches and preoccupations between countries and identified the complex and multidimensional character of the integration process which involves numerous economic, social and personal factors. They also showed that while longitudinal approaches are a favoured means of investigation they overestimate the role of individual behaviour and should thus be seen in combination with analyses of labour market, occupations and changes in corporate strategies. Beyond, the conference identified various issues which stress the need to redefine the concept of integration and the analysis of the relationships between training and employment:

- in-depth analysis of the organization of the occupational transition, its forms and rhythms (ranging from insertion to exclusion via a number of instable trajectories);
- the role of the different stake-holders (education system, companies, individuals);
- a better understanding of the role of initial education and training, which while being of fundamental importance, combines with a whole series of other factors to produce integration (or exclusion!);
- the existence of national integration patterns or "models" and their transferability;
- defining the various forms of exclusion (occupational, social, long-term, temporary...) and their interpretation (process vs. state, "inverted image" of integration vs. specific process...).

Frédérique Rychener
Project Manager, CEDEFOP

¹ formerly "European Research Network on Transitions in Youth"

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Session 1

Perspectives on systems, institutions and changes

Karl Ulrich Mayer
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Berlin

Summary report

Introduction

Europe in the middle of the nineties is confronted with the following problems:

- 1) Can the economies of the European Community remain competitive in the world markets?
- 2) Which industrial strategies and which institutional conditions will most ensure success in intra- and extra- European competition?
- 3) Which political economy will become the standard or model within the European Community and for the integration of Eastern European countries?
- 4) Irrespective of differential economic success which institutions and policies satisfy optimally our criteria of welfare, social justice and social integration?

In this conference we are concerned with the institutions of general education, vocational and occupational training and their effects on the social and economic integration of young people. As a shorthand let me call this the training-employment connection (TREMPE).

We look at transitions of complete successive cohorts of young people as a major empirical and methodological tool for mapping these institutional linkages and their dynamics. This in itself as a comparative and systematic enterprise is a complex and formidable task.

There is first the task of developing good typological or classificatory systems for national education/training systems. Second, there is the task of developing more satisfactory and valid measures of "insertion" and integration into labour markets and into society. On this basis we can start finding answers to the question:

1. How do the different national systems of training and employment affect transitions?

Methodologically this corresponds to a comparative static approach.

But we also have to reverse the independent and dependent variables and ask:

2. How do changes in transitions - transition behaviour and labour market opportunities - affect the education/training systems?

This research agenda is well-established, but far from completed and there appears to have been more progress in the first area than in the second. The papers presented to this conference and to this session make important contributions to this agenda and I will come back to them later. It is a research agenda which fits best into a relatively stable international environment and proceeds from the assumption that nation states have primarily internal problems to solve, as, for instance, adjusting to changing numbers in supply and demand.

My initial questions suggest, however, that we have to go beyond that agenda. It might well be the case that the national institutions of the training-employment complex which often were taken to be historically and culturally grounded and ultrastable will come under severe

pressures to change. The national-training-employment complexes will be either assets or liabilities in the economic competition.

Thus we have to raise four further questions:

3. What are the most salient changes in the national and international environments affecting both the institutions of the training-education complex and the labour market opportunities of young people?

4. What will be the likely outcomes of these changes?

5. Which variant of national training-employment complexes will survive in the evolutionary selective process or - to put it less dramatically - will shrink or grow, diminish or increase in relative importance? (TREM as dependent variable)

6. Assuming the ultrastability or inertia of national TREM - institutions how will that affect economic performance? (TREM as an independent variable)

7. Irrespective of their contributions to economic efficiency which institutions will fare well or badly in the social costs connected with it?

Finally - given the goal of this research network - we should address the question whether and how these issues can be tackled by longitudinal and cohort analysis.

I will now make a number of comments on this set of questions relying heavily on the papers contributed to this session.

1. National systems and institutions governing the education-training-employment linkage

A major institutional characteristic dividing (West-) European societies is the way in which crucial transitions are organized within the educational system, in regard to:

- the transition from elementary school to the secondary level (which decides the extent and duration to which all pupils receive a roughly similar education);
- the institutional differentiation on the secondary level;
- the degree of the integration of vocational training into general schooling;
- the access to universities;
- the integration and differentiation of tertiary education into shorter and longer courses of study and according to institutionalized and visible levels of quality.

These transitions at the same time mark crucial 'choices' for societies:

- a long and non-selective period of basic education for everybody vs. early selectivity and subject differentiation;
- general schooling systems without vocational curricula vs. dual firm/school vocational training, integrated or mixed systems;
- a division of institutions in the tertiary sector according to short and long courses or integration;
- tertiary education as professional or general education.

On the one pole of recent changes in educational institutions (Leschinsky/Mayer, 1990) we find Sweden with a near total switch of a secondary education in the direction of a system of low selectivity, no grade repetition, no differential grading until class 11 and almost unrestricted access to university after age 25 and 5 years of occupational experience. After ten years of initial schooling the 'schooling model', i.e. bringing as many youngsters as possible up to a high age level within a comprehensive system, comprises as nations Sweden (85-92% of the

17 year olds), the US (87%), Japan (94%), the Netherlands, Denmark and France. Schooling systems organize all educational options after compulsory schooling age within the schools themselves: differentiation between subjects and quality level is internal. For instance, Sweden has 23 different 'tracks' in a vocational stream of 2 years and a Gymnasium stream of 3-4 years (Dahllöf, 1990). Likewise France has extended the "collège" to make it more and more comprehensive, but factually there is a high degree of social selectivity between schools (Prost, 1990; Duru-Bellat/Mingat, 1990).

The major deviation from the schooling societies have been the countries under German influence with a surprisingly persistent dual system of vocational training, i.e. West-Germany, Austria and Switzerland (partially Poland and Hungary). In these countries a very high proportion of young men and women enter dual vocational training (in West Germany about 60% of young men and 50% of young women). In addition, full-time vocational schools of various sorts co-exist with apprenticeships in the dual system and general schooling. If one includes all forms of vocational training in the indicator "proportion of 17 year olds in education", the Federal Republic of Germany (90%) comes second after Japan (96%). The UK is on the other extreme with about a third of youngsters that age in education and close to a fifth unemployed.

In some respects the dichotomy between 'schooling societies' and 'apprenticeship societies' is too sharp and too exclusive. On the one hand, for some countries it may be more appropriate to speak of a 'sequential model', since vocational training is placed in state institutions which are separate from schools and are entered after the completion of the school years. The major issue here is the degree of universality such systems achieve (which tends to be low). On the other hand, there are societies which integrate high quality vocational training into firms without either a schooling component or generally valid licences (Japan). For the purposes of this discussion the crucial institutional characteristics are the responsibility of firms for training, the integration of training into firms and the licensing and the transferability of vocational credentials.

Despite major attempts especially by the UK and France to increase vocational training programmes (Raffe, 1992; Tanguy, 1991 a,b) the institutional divide between schooling societies and apprenticeship societies has persisted and remains highly influential for future work lives and career development:

- i) Apprenticeship systems manage the transition between schools and employment much more successfully than schooling (or sequential) systems. Youth unemployment, marginal employment and stop-gap-jobs are much higher in non-apprenticeship systems (as are most probably juvenile delinquency and drug abuse). Depending on the indicator (16-20 year olds vs. under 25 year olds) in apprenticeship systems is either only as high as the adult unemployment quota or even much lower (Rose/Wignanek, 1990; OECD, 1985).
- ii) In apprenticeship systems dropout rates during training are very low and the proportion of graduates retained within the training firm or within their occupational fields is very high (Rose/Wignanek, 1990).
- iii) First jobs after training in apprenticeship systems tend to be of especially long duration and are typically not search-jobs. This suggests that the matching process between people and jobs is particularly successful in such systems (Mayer/Carroll, 1987; Allmendinger, 1990).
- iv) Dual systems provide a combination of firm-specific and more general skills. Their licences do not only allow switching firms, but they also provide a more general social status and respectability which can be used as a resource in switching to other occupations. Downward occupational mobility from skilled to unskilled jobs is comparatively low in apprenticeship systems.
- v) Apprenticeship systems and countries with similarly highly regulated vocational training provide lifelong occupational identities.
- vi) Apprenticeship systems and other in-firm training systems proliferate institutional mechanisms to develop and to reward trainers, as e.g. the Ausbilder and Meister in the German system. They therefore not only have a continuous influx of up-to-date technical knowledge into the firm and mostly cost-free individual training investments, but in this way they also have a means to open up an internal career step, to keep highly qualified personnel within the firm and to provide for the trainers a highly effective stepping stone to managerial positions within and outside the firm (Mayer et al, 1989).

vii) Apprenticeship systems have been much more successful in integrating low school achievers, minorities and foreigners into training and occupational careers.

viii) On the negative side dual systems define vocational training outside the labour force and introduce an additional transition and threshold on the way between schools and employment. Since each step opens new risks (but also opportunities) selectivity in the system increases, since after training a new employment contract has to be formally signed.

Apprenticeship systems have been remarkably successful in keeping up training opportunities during times of high unemployment (Rose/Wignanek, 1990), but have been less successful on the threshold after completion of training where (mostly short-term) unemployment rates have risen above 10%. But even then unemployment has been lower than in most schooling societies (the Scandinavian countries having been the exception until recently).

ix) Apprenticeship systems fare clearly less well for women as compared to men, since most traditional industrial and craft trades are almost inaccessible for women and the range of options in apprenticeship occupations is much lower for women. Apprenticeships are much more frequently located in services and lead much less frequently to stable careers (Blossfeld, 1991).

x) Apprenticeship systems and highly regulated vocational and professional training lead to occupationally segmented labour markets. They provide high-wage jobs with more stable employment contracts, but severely restrict the range of options on the labour market. Countries where such institutions predominate should show a much lower ability to readjust employment structures by intra-worklife mobility. In contrast, countries with less occupationally segmented labour markets probably provide less employment stability, but have lower reservation wages and a much broader individual range of options on the labour market. The empirical issue here is to which extent occupationally specific skills can be used as general signalling resources on the labour market.

Whatever the validity of the above description we can at least make the assumption that traditional, historically grounded differences in educational systems on the one hand and the uneven outcomes of the educational reforms of the 60s and 70s on the other hand do constitute basic differences in the organization of the life course. Although enrollment rates in secondary and tertiary education and the growing participation of women in higher education are nearly universal features of advanced societies (with the exception of Switzerland) at the beginning of the 90s clear intercountry differences in both participation rates and institutional arrangements persist.

The papers by Peter Blossfeld and David Raffe make important contributions to the mapping of education-training-employment institutions and the resulting transitions which go beyond the dichotomy between apprenticeship systems and schooling systems.

Blossfeld locates the importance and current strains of vocational training in the functional requirement of advanced societies to match the qualifications needed in the occupational structure and the skills provided by the work force. The more rapid technological and organizational change, the more important the skills transmitted by the vocational training of new entry cohorts becomes.

Blossfeld suggests mapping national vocational systems according to three dimensions:

- 1) How vocational training is related to schools and the workplace;
- 2) how standardized the curricula and skills are (and who standardizes them); and
- 3) how vocational training is stratified internally and in relation to other educational and training tracks.

The first dimension addresses the problem of how to combine theoretical learning with practical work experience and thus Blossfeld sees vocational schools as separate institutions or integrated into the school system, such as in France, as the one pole and the UK, the US or Italy with mostly direct transitions between general education and work as the other pole. In this view vocational training in schools is analytical, but not practical enough and mere on-the-job training is practical and concrete, but too firm- or task-specific and therefore a potential liability in the later work life.

Dual systems are seen as most advantageous, since they succeed in incorporating general and specific, theoretical-analytic and practical elements. Blossfeld's criterion of evaluation is here the readiness of the system to prepare for fast technological and occupational change.

Blossfeld notes that the German system has partly become more analytical over time, because large firms provide theoretical instruction within the firm in addition to the instruction in vocational schools which should weaken the on-the-job-training aspects.

With regard to standardization, Blossfeld shows a more ambivalent position. Standardization - high in the German dual system and low in on-the-job-training, but also in many out-of-firm training schemes - is helpful as a signalling device in later job mobility across firms, but may also result in outdated occupational tracks which increase labour force rigidity and reduce job mobility. Blossfeld predicts that on-the-job training leads to closed internal labour markets and standardization to closed occupational labour markets which may both be unfit for modern economies. He also notes as counterweights in Germany the inclusion of employers in the standardizing procedures and the introduction of more broadly defined apprenticeship tracks.

Finally, with regard to stratification, Blossfeld again praises the German dual system for its ability to prevent downward mobility and to further upward mobility for those with a certified training, but also notes the inferior opportunities for those without training. In contrast on-the-job-trainees and vocational school leavers in other countries are seen as less protected, but also as less locked in the labour market. Requalification especially in later work life is restricted in the dual system and much less so in more open labour markets.

Blossfeld notes that the German dual system has done remarkably well in comparison in reducing youth unemployment and in getting youngsters into firms. One could add that it has also done remarkably well in adjusting to demographic changes in supplying potential apprentices, that it has so far survived the massive increase of general education by being used in addition to it rather than as a worse alternative. And it has also done fairly well in integrating immigrants and foreigners.

I should mention here in passing that in addition to his three dimensions Blossfeld uses a set of very useful concepts for his evaluation: structural flexibility (vs. occupational closure), generational flexibility (vs. unqualified new labour force entrants), hierarchical flexibility (vs. vertical closure) and training flexibility (vs. exclusive early career training). In his ideal world flexibility on all these dimensions would be increased while keeping the learning potential and securities of the German dual system.

Blossfeld's piece is exemplary and stimulating for further research for its relating of training systems not only to initial employment entry opportunities but also to later patterns of job mobility.

There are two aspects where his analysis could and should be complemented. On the one hand, he focuses almost exclusively on the qualification needs of the economy. It might, however, well be in the future that while a German type of dual vocational system and system of occupations would satisfy such needs, the corresponding high wage and high quality production would tend to restrict the overall volume of employment and thus might lead to the exclusion of a significant part of mostly older workers from the labour market.

The other aspect relates to the fact that Blossfeld focuses on vocational training and their modal types within given nations. It is, however, important especially for an analysis of change to treat the full array of transitions, their relative shares and changes over time.

In this latter regard, the contribution by David Raffé on "Tracks and Pathways: Differentiation in Education and Training Systems and Their Relation to the Labour Market" is a very useful one. Raffé uses the empirical patterns of flows in the transitions between general schooling, vocational institutions and in-firm training to suggest a typology of institutions. Raffé thus addresses the first as well as the second of our main questions.

2. How do changes in transitions - transition behaviour and labour market opportunities affect the education /training systems?

In "pure tracking" both the general track and the vocational track are separate, have their own internal career logic and progression and can only be entered at the lowest entry point. Raffe sees Germany closest to this type, but I have some difficulty with this allocation.

Flexible tracking allows switches between general education and short vocational training at each level and in both directions, for instance by transfer credits (or by picking up general certificates in the vocational sector as in Germany). Raffe sees Spain and the Netherlands moving in this direction.

In the "general track type" each level of general education has its corresponding (and dead-end) vocational complement and it looks a lot like the traditional German system.

Finally the unified track type combines general schooling and vocational training within the same institutions at each level. It resembles closely the system in New Zealand, Sweden, Scotland and Australia are seen to be moving in this direction.

Adding training in firms to these figures starts defying easy typologies (which is gratifying to the longitudinal researcher), but as a start the four types can be applied.

In the a) pure tracking type in-firm training also constitutes a separate and hierarchically structured passage. The b) type allows flexible changes on all levels. The c-type keeps the general track pure and allows for flexible switches between training and vocational schools. The d-type allows for flexibility between general education and training, but segments training and vocational schools.

Raffe oscillates as to the epistemological status of his tracking types. While on the one hand he plays with the idea of "reverse causation" to talk about institutional trajectories and constraints, on the other hand he sees his types as empirical outcomes of aspirations, decisions, constraints and institutional rules.

Raffe's grids are a useful initial instrument to map and to compare national institutional arrangements, but they are even more interesting, because he asks himself which of his types are likely to stay in equilibrium and which are likely to be unstable. Thus one would have to add to his picture both a time-dimension and a calculus for changing participation rates.

Raffe's major predictions are as follows:

- There is a trend from pure via flexible and general to unified systems.
- Pure and flexible systems are inherently unstable.

Basically Raffe sees the expansion of general education as a threat to vocational participation, since vocational tracks lead to early "dead ends" and restrict choices. But vocational tracks can remain attractive, if they offer access to internal firm labour markets, as for instance with Daimler-Benz or the Deutsche Bank.

Finally, Raffe predicts that participation in vocational tracks will be higher depending on the number and variety of pathways including vocational training, the opportunities to transfer to the general track and the range of occupations to which any of the vocational courses lead.

There are a number of other hypotheses covering the outcomes of competition between general and vocational tracks under varying institutional conditions and they might be worthwhile pursuing in empirical research.

My major comment on Raffe's contribution is that he goes in the right direction, but not far enough:

- As a typology for existing national systems his types are a good heuristic, but they are not fully convincing. How for instance would one account for the fact that German Abiturienten enter shortened banking apprenticeships which are totally reserved for them? There

seems to be an inherent fusion or even confusion between a typology of institutions and a typology of behaviour patterns.

- Empirically, his scheme is too restricted, among other things because age and duration as well as type of vocational training and type of destination labour markets would have to be included.
- Theoretically, Raffé makes an important step towards a rational choice actor-centered theory, but he almost exclusively looks at the youngsters as the only actors and does not consider the parents, the firm and the state (and in some nations the unions) as important actors. Thus, for instance, his hypothesis 5b (Participation in vocational tracks is higher, the greater the opportunities for transfer to the general track – incl. general education –) cannot be upheld, once the interest of employers are introduced because they will not offer apprenticeships or training places and invest in them, if they cannot hope that a sufficient number of graduates will enter the internal labour market.
- Politically I find that he is too cautious in drawing out the implications of his reasoning. It seems that either the demise of vocational training and/or its full incorporation into the general track will be the future of European training systems, if we follow Raffé.

David Ashton's paper "Understanding Change in Youth Labour Markets: A Conceptual Framework" is extremely helpful in finding answers to my third question:

3. Which are the most salient changes in the national and international environments affecting both the institutions of the training-education complex and the labour market opportunities for young people?

Ashton defines a youth labour market as one where older workers do not compete or compete less with younger workers for jobs either because employers exclude younger workers from adult labour markets or due to segments in which preferences are given to younger workers.

He then asks how youth labour markets will be affected by major ongoing economic changes.

Ashton lists three major areas of change:

- The rise of multi-national firms.
- The emergence of transnational trading blocs.
- Changes in the organization of production within firms.

The rise of multi-national firms undercuts national control of economic development and leads to quick pace in the redistribution of jobs within an international division of labour. Jobs in manufacturing and production are lost in the old industrial countries. While over the last decades mass-consumption goods were progressively produced in low-wage countries, currently competition has become fierce even in high technology goods. Ashton sees this as the major reason for the ongoing shifts in the occupational structure. New cohorts of entrants to the labour markets find not only a shrinking market in manual jobs in production, but also in the white collar ranks of production firms, in retail and distributive services. Multi-national firms also tend to foster internal firm labour markets and tend to undermine national institutional forms of training and personnel management.

The emergence of transnational trading blocs is seen by Ashton as the emergence of three major types of the regulation of the economy: US open-market rugged individualism, Japanese firm-based loyalty and the social contract ideas of Eurocapitalism (debated so intensively in regard to the Maastricht agreement). Ashton maintains that these trading blocs might lead not only to specific forms of product markets, but also to varying forms of labour market segmentation, industrial relations and education-training-employment linkages.

Changes in the organization of production within firms follow Japanese examples of lean production, just-in-time division of labour and delivery systems, a reduction in hierarchical layers and more cooperative, than hierarchical forms of labour control. These new forms of firm organization and the introduction of new technologies undermine traditional definitions of occupational tasks and identities, require more firm-specific skills and longer time commitment of workers to firms and vice versa. Above all they require different kinds and different levels

of human resources: more communicative and analytical skills and generally higher qualifications.

But Ashton also notes that the move towards the production of high value goods and the corresponding organization changes are only one option in the new world of international competitiveness. The other option is to maintain or even to regress to deskilling and low wages as a means to keep profitability. Under this option the qualification and motivation requirements of the work force and new entrants might become even lower than in the past.

Ashton sees two main factors mediating the impact of these changes on youth labour markets: national political elites and given prevailing forms of labour markets: occupational labour markets, firm internal labour markets and external labour markets. Again, countries are mapped to these distinctions:

Germany as a combination of OLM with a significant share of FILMs in big firms; Japan with FILMs with a minor share in OLMs; the UK with a sector balance of FILMs and OLMs.

What are the consequences of these major changes for youth labour markets in Ashton's analysis?

Ashton expects that the new trading blocs will have homogenizing effects on the institutional forms of youth labour markets. Thus he sees a political struggle within the EC about which training and certification system will dominate.

In regard to new forms of work organization Ashton expects that FILMs will be strengthened and that OLMs will be shrunk or be adapted to suit the needs of large firms. Ashton describes the German, Austrian and Canadian ways of adapting to this new situation: a two-tier system with two very different forms of apprenticeships in large and small firms in Germany, the substitution of apprenticeships by on-the-job training and traineeships in large firms in Austria.

In general Ashton predicts that all forms of in-firm training will become more important and that general education or vocational schools will be seen as insufficient preparation for work in the new kind of firms. It is noteworthy that this prediction stands in direct contrast to the one made by Raffé. This has also led to increased interest on the part of industry in the school curricula and in the integration of school- and work-based learning. New firms will also push for higher skills among their recruits and will be much more selective.

In conclusion Ashton takes a closer look at educational systems and the consequences of secular changes they have enacted or experienced. He sees the educational systems as fairly passive and unable to respond. Currently firms also cut down on recruitment and training and thus increase youth unemployment. Only Germany is taken as an exception, because it already allows the employers considerable control over training curricula, while the UK has responded in a manner not favouring youth, but by relying on women for service jobs. In conclusion Ashton deplores the rigidities of the educational systems which leads to increasing youth unemployment at the upper and lower level of the educational hierarchy.

But Ashton rightly points out that governments could play a much more active role both in shaping trading bloc decisions and in their choices for product strategies. If I understand him correctly he would like to see the British government embrace the Social Charter and follow the German route of high value added goods, because both would enhance the training and employment opportunities of young people. The reliance on pure market forces in contrast will result in high youth unemployment or bad jobs in external labour markets.

Ashton's framework provides an important stepping stone for comprehending the impact of external, often international changes on youth labour markets and the related institutions. His paper, however, clearly points out the discrepancies between the seemingly clear major changes and the puzzling variety of national institutional histories.

Let me point out a number of issues in this context:

- The changes described by Ashton most significantly affect core industries and sectors, but they constitute only a tiny minority of school leavers and young people in training. What about the others? What especially about girls and young women?
- One would therefore have to assume that internal conditions and dynamics will determine the development in this area more than external changes.

Such internal conditions and dynamics might include

- the competition between general education and vocational training envisaged by Raffé;
- changes in the share of public employment;
- the development of the health sector;
- the higher participation of women in general education and occupational training as an endogenous development;
- changes in the organization of general education and occupational training;
- changes in the structure of occupational demand;
- changes in the demographic size of birth cohorts;
- sharp changes in employment;
- changes in the relative strength and interaction of employers, the state and trade unions;
- value changes in the meaning and salience of work, careers and employment.
- If the level of required skills is rising, if their nature becomes more general and analytic and if specific knowledge becomes obsolete more rapidly than ever, does that not imply 1) that general education will become more important than vocational training, and 2) that even in countries like Germany the proportion of young people with no more than compulsory education will increase?
- I find it problematic in Ashton's analysis that the upgrading of the occupational structure is only related to multi-national firms and trading blocs. This seems to me rather an accelerating factor of a tendency which is much more fundamental.
- The world economy under conditions of intensified division of labour and competition not only in manufacturing, but also in services will most likely leave a significant part of a cohort without any or at least any qualified employment. What are the educational, vocational and training institutions we need for these groups? I often see a very restricted functionalism operating. We only ask what is functional for a competitive and efficient economy and not also what is functional for a just and good society. Do we not need protected youth labour "non-markets" where people can do demanding and reasonable things, because an efficient economy does not provide a sufficient bulk of jobs and long enough working lives.
- I do not share Ashton's vision of the emergence of a single system of training in Europe. This is not necessarily the evolutionary outcome. Another outcome could well be an economic specialization between countries in producing services and goods which are most appropriate for the education and training institutions and for the traditional labour markets they have.

The paper by Karen Schober on the East German youth labour market tells a dramatic story about a case of extreme exposure to "international" competitiveness:

- Most of the remaining training places will not lead to employment after completion of the apprenticeships.
- Young people interrupt their training because they do not expect to become employed afterwards.
- Firms stop training young people except in return for direct state subsidies.
- Young people crowd into general education because there are not any or no promising offers on the training market.
- Young people migrate to West Germany and probably will never return to the eastern states.
- The state intervenes by establishing training centres.

All this happens on the basis of a traditional system with an almost complete OLM integrated into FILMs.

International Competitiveness and the German Work Life: Myths and Changes

Several authors (Soscice, 1992; Thurow, 1992; Dore, 1987) have made a strong case that institutional differences between the US and the UK on the one side and Germany and Japan on the other side not only account for the degree of solidarity and equity in these countries, but also for their variations in international economic competitiveness.

"In recent work something like a pattern is beginning to emerge, pointing to similarities between Germanic, Scandinavian, Japanese and even Italian institutional economic systems. There are, of course, great differences between the organization of Scandinavian and Germanic economies, as there are, say between the Swedish and Danish systems or between the Austrian, German and Swiss; and greater differences again between these Northern European systems and the Japanese, with Italy (minus the Mezzogiorno) beginning to find itself.... somewhere along that spectrum. Similarities are, however, concealed behind these differences, in terms of incentive structures, institutions and relationships" (Soscice, 1992:4)

Within this debate the distinctions between schooling, sequential and dual systems and their outcomes have been singled out as a crucial element and they have been taken as historically grounded, culturally buffered and almost ultrastable. Reforms from either direction seem to have failed or to have been carried through only half-heartedly. Educational reform in West Germany has not been successful in integrating vocational tracks into general schooling. As an effect the prolongation of general schooling is increasingly added to conventional kinds of vocational training. Reforms of vocational training in France and Britain have brought improvements, but have hardly changed overall opportunities and transitions (Raffe, 1992; Tanguy, 1991 a.b). Therefore an argument could be made for the relative stability and persistence of the national institutional arrangements in education and training as a quasi permanent condition of the provision of skills and the distribution of technical knowledge as well as of the corresponding social organization of working life.

I would like to make the counterargument here. I will take as a starting point those institutional arrangements which have been taken as the basis for the advantageous position Germany occupies in the struggle for international economic competitiveness. I will then argue how precarious that position actually is and in that way I will try to pinpoint some of the causal mechanisms responsible for change-of-lifecourse regimes.

The relatively advantageous position of Germany (and Austria and Switzerland) appears to be based on the following institutionally-based characteristics:

- near universal and fairly long vocational and occupational training with credentials which can be transferred between firms;
- a high commitment of unions, the state and the employers in training and joint regulatory mechanisms (Streeck et al, 1987);
- a constant upgrading of occupational, especially technical qualifications through centralized vocational and occupational curricula;
- a highly regulated system of trainers (Meister, Ausbilder) within firms;
- a small number of hierarchical levels and a low span of control within firms based on the high and flexible qualifications of skilled workers (Lutz 1976, 1989; Maurice et al, 1979);
- the recruitment of middle and even high level managers and sales personnel out of the ranks of technically qualified workers and engineers;
- a fairly efficient and state supported system of re-training for unemployed or young workers unable to find work in their areas of qualification (Becker, 1991);
- increasing rates of further qualification in and outside of firms and increasing financial funds devoted to skill development (Edding, 1991).

My thesis is that the conditions in which the dual system could operate as an asset in economic competition are the outcome of a historically very specific situation which is gradually being

undermined and changing up to the point where many of its presumed advantages for international economic competitiveness will vanish:

i) The career ladders leading from skilled industrial and craft workers via Meister qualifications, technicians and engineers to middle and high level technical staff, managers and sales personnel are the outcome of a period between the end of World War II and the end of the sixties. In this period restricted educational opportunities brought large proportions of young men into apprenticeships which a good part of them then used as a stepping stone for further qualifications and intra-firm careers.

With ever increasing proportions attaining Realschule degrees and Abitur, fewer and fewer of the more able will go through the dual system, but rather go directly from school to vocational colleges (Fachhochschulen) and universities. Intrafirm careers are being replaced by the elevator within the educational system. Even where training in the dual system is currently added on to extended periods of general schooling, the dual system increasingly loses its purpose, since the Berufsschulen can add little in terms of general skills to what has already been learned in schools before.

ii) The recent upgrading in qualifications required of many vocational tracks, especially in industrial manufacturing, and their reduction in number, will bring technical apprenticeships closer to the level of technicians and lower level engineers and will require prior schooling levels above Hauptschule. This will greatly weaken the effectiveness of the dual system in providing vocational training for the less able half, to integrate low school achievers and children of foreign origin. It will increase the proportion of youngsters without vocational training and exacerbate the problem of their social integration and transition to the labour market.

iii) To the extent to which vocational qualifications are becoming less based on occupationally specific skills (centered around specific materials and tools), but require more general analytical skills (as, for instance, the handling of computers), the necessity and advantages of firm-based training become less salient. General schools might do just as well or even better to teach such skills. Thus the rationale of the dual system is undermined already from the supply side and probably soon from the demand side. Employers may find youngsters with general school certificates more attractive, because they tend to be more capable although they lack workplace-specific socialization.

If these tendencies prevail we might expect a rapprochement between what I have called above schooling and apprenticeship societies. Germany will then face many of the same difficulties as other societies with regard to the transition from schools to employment and with regard to the social integration of less able young people.

It may be an irony of societal development that the general trend towards extended general schooling, which originally was motivated by manpower requirement arguments, but was more forcefully pushed forward by family aspirations and political motives, in the end appears to fit well with the much later development and requirements of technological re-structuring and occupational upgrading. It might also create an opportunity for a convergence of the education-training-employment linkage in Europe.

Understanding Change in Youth Labour Markets: A Conceptual Framework

Abstract

The objectives of this paper are to sketch out the direction in which youth labour markets are moving in the 1990s. It attempts to provide a framework which will help understand the underlying processes of change in the mode of production and how these have created certain problems which are common to all industrial societies. Three main processes of change are identified: the introduction of new levels of economic organization in the form of trading blocs, the growth of new forms of organizational structure and a demand for new skills. All these are seen as having a significant impact on the youth labour market. However, these factors do not impact on the youth labour market directly, their influence is mediated by a series of national institutions, the most important of which are: the world view of political elites; the orientations and actions of business elites; and the form of labour market organization. The purpose of such a conceptual framework is to locate the study of the transition in the context of contemporary debates on the transformation of capitalist societies.

Introduction

The aim of this paper is to provide a framework or conceptual model for understanding the changes taking place in national youth labour markets in the 1990s. A number of forces of change are identified which are operating on the labour markets of all industrial societies and less directly on their youth labour markets. It is argued that these changes stem from a fundamental transformation in the method of organizing production which is leading to the emergence of new regional trading blocs and at the same time creating a demand for new skills among (young) workers. These represent the underlying processes which are creating change in all youth labour markets.

The initial impact of changes of such magnitude is on the national economy. Yet even here they are mediated by the actions of political and business elites. This is just one reason why we can expect their impact to be variable across societies. Once they affect the national economy this is evident in changes in the general labour market. However, national labour markets are not identical, being structured in different ways. In some, the dominant principle of organization is that of the occupational labour market, others are dominated by the contrasting principle of firm internal labour markets and yet others by the principle of external labour markets. Hence, these different forms of labour market organization also function to mediate the impact of the forces of economic change on the operation of national labour markets.

When it comes to examining the impact of these changes on the youth labour market we have to take into account the influence of another mediating institutional, namely the educational system. Once again the structure of this institution is variable across nations. Moreover, because it is subject to political control, the educational system does possess a degree of autonomy in relation to the labour market. Therefore, although of less significance than the principle of labour market organization in mediating the impact of economic change, the educational system can still exert a powerful influence on the youth labour market.

It follows that whereas the forces of economic change operate in a uniform manner on each society, the institutional structures which mediate their impact tend to have unique national

characteristics. The result is that that fundamental changes which are taking place in the method of organizing production create significantly different consequences in each national youth labour market. In view of this, we are not looking for identical changes in each of the labour markets of the industrialised countries. There may be some similarities in the broad pattern of change across some youth labour markets, but the specific manifestation of those changes will vary from one national youth labour market to another.

The main body of the paper spells out the argument in more detail. The objective being to identify the sources of change which are acting on all societies and to identify some of the ways in which the national educational and labour market institutions mediate the impact of these forces of change on the youth labour market. In a short paper such as this it is not possible to identify all the changes which are impacting on national labour markets or the various ways in which the national institutions mediate their impact on the youth labour market. All that is intended is to establish a framework that will enable meaningful comparisons to be made of the changes that are likely to impact on the youth labour market in the remainder of this decade.

The concept of the youth labour market

The concept of the youth labour market has been used to distinguish the labour market for youths from that of adults. In our earlier work we claimed that although the youth labour market is closely linked to that of adults, nevertheless there are distinctive features which also differentiate the youth labour market (Ashton, Maquire and Spilsbury, 1990). We argued that the youth labour market derives its distinctive features from the existence of sections of the adult labour market from which young people are excluded and of other jobs for which only youths are recruited. These features are a product of the interaction between the employers' demand for labour and the institutional form of educational systems.

This can be illustrated with the following examples. In Germany the transition into employment is highly structured by the institutional form of the apprenticeship system. There young people are compelled by law to continue their education until age 18. While the provision of full-time education ends for the majority at 16 they continue their education within the framework of the apprenticeship system. This means that employers requiring the labour of young people are obliged to use the apprenticeship system, for which entry is restricted to school leavers. Adults cannot compete for these jobs. In this case the differentiation of the youth and adult labour markets is very clear. Youths do not enter the adult labour market until they complete their apprenticeship. In other societies such as Canada, where there are relatively few points of entry to the labour market or training programmes that are restricted to school/college leavers, the differentiation of the youth and adult labour markets is less pronounced. There youths, immediately on leaving college, are in competition with adults over a much greater range of jobs.

While youth labour markets can be differentiated in this manner from those of adults, they are still subject to the forces of change which operate on adult labour markets. The degree of autonomy from the adult labour market which the youth labour market may enjoy, that is the degree to which fluctuations in the demand for youth labour and the structure of opportunities open to them directly reflect those for adults, has never been systematically examined. One possible determinant of such autonomy is the extent to which the state and other interest groups structure the transition through training schemes. Thus the countries which had a low ratio of youth to all age unemployment in Europe throughout the mid and late 1980s were Germany and the UK where the transition was structured by large scale training schemes (Garonna and Ryan, 1992, p7) (1). However, no matter how formally structured the transition, the youth labour market is always subject to the influence of forces of change acting on the labour market as a whole. Therefore, in order to understand how the youth labour market will change in the future, we have first to determine the nature of the forces of change acting on the adult labour market.

Sources of economic change

It is clear from the literature on social and economic change that industrial societies are currently undergoing a fundamental process of restructuring, but it is also evident that there is confusion over both the sources of that change and its direction. Lash and Urry (1987) speak

of "The End of Organized Capitalism", Piore and Sabel (1984) of "The Second Industrial Divide", while other authors refer to the emergence of new "Post Fordist" forms of production or new regimes of "flexible accumulation" (Harvey 1989). There is a growing awareness of the emergence of new ways of organizing production associated with an understandable confusion about how best to conceptualize them (Whitaker, 1992). The debate is not so much over whether the changes identified are taking place, only whether or not they constitute a transformation of the capitalist system (Wood, 1989). This is not the place to enter into a detailed discussion of this issue. Our concern here is with the youth labour market, not the theory of capitalism. Nevertheless, in order to proceed with the argument it is important to introduce some clarification if we are to identify the main sources of change acting on the (youth) labour market. The following provides an initial attempt to tackle this question.

The significance of multi-national corporations

One of the most fundamental changes occurring in the process of capital accumulation is the growing significance of the multi-national corporations (MNCs) which are increasingly dominating the process of production and distribution (Whitaker, 1992). As production is organized on a transnational basis, national governments increasingly lose control over the economy. Major economic decisions concerning investment and job creation are increasingly taken outside the context of national economies and such decisions cannot be influenced through the fiscal measures governments have used in the past to exert their control over the economy. National economies therefore become subject to economic forces, in the form of investment decisions and capital flows over which political leaders exercise little control. Capital is relocated in accordance with the needs of MNCs leaving national governments to vie with each other for the creation of new jobs and the maintenance of existing ones. It is in this sense that we can see the actions of MNCs as a common source of change acting on all industrial societies (although some are more vulnerable to them than others).

One of the most visible consequences of this has been the redistribution, between societies, of jobs in the manufacturing and service industries. In general, the older industrial societies have lost some of the jobs associated with labour intensive production to the low cost developing societies. However, this movement of capital is not just confined to that involved in labour intensive forms of production as the recent relocation of the domestic aerospace industry from the UK to Taiwan testifies. The governments of new industrial countries in S E Asia have been particularly active in encouraging the location of companies operating in the production of higher value added goods and services.

Associated with the growth of MNCs have been major advances in human productive capacity. The introduction of new technologies, especially those in the field of electronics have transformed the level of human productivity in the manufacture of goods and in the provision of financial services. In addition, they are revolutionizing forms of communication and creating the conditions for the emergence of MNCs. For example, instantaneous forms of communication enable humans in different parts of the world to organize their activities in concert in a way that has hitherto been unimaginable. Similarly, they enable organizations to transmit vast quantities of information irrespective of national boundaries.

One of the main consequences of these changes for the labour market has been a restructuring of opportunities facing new entrants. The proportion of manual jobs is being reduced while that of non-manual jobs is increasing. This has come about as a result of the decline of manufacturing employment, especially unskilled manual work stemming from the relocation of the labour intensive industries and the impact of new forms of production which have reduced the demand for unskilled labour in the production process. The same processes have led to the decline of traditional craft skills or to a change in the nature of craft skills and the growth of white collar staff for the production industries.

In the service sector the growth of new national and transnational businesses in the commerce and leisure industries has led to an increase in demand for two different types of jobs. The growth of new knowledge-based industries in the service sector has increased the demand for professional and other white collar workers, but the rationalization of the retail and distribution industries together with the growth of new businesses in the catering and leisure industries have increased the demand for part-time workers.

These changes are well known but just how they impact on the youth labour market in any one society will depend on a number of factors. For example, those societies such as Germany

and Japan that have been particularly successful in developing multi-national manufacturing industries have witnessed less of a decline in manual employment than countries such as the UK. We discuss this and other factors below. All we are concerned to do here is to discuss the general direction of occupational change which is taking place in all industrial societies.

The emergence of transnational trading blocs

A further change associated with the growth of MNCs has been the intensification of competition between companies on an international level. Here we appear to be witnessing the emergence of a new level for organization, namely that of the regional trading bloc. While multi-nationals may conceive of production on a world scale, the dominant focus of competition is rapidly moving away from national markets to that of emerging regional blocs.

At the moment it is possible to identify four such blocs: North America, centred around the North American Free-Trade Agreement; Europe, centred on the European Economic Community; the Pacific Rim, centred around Japan; and S E Asia, centred around the Association of South East Asian Nations agreement. (2). These are the trading blocs within which the MNCs are operating, each with its own internal rules and associated institutional structures. These institutional forms provide the ground rules which regulate competition in the process of production and distribution. Thus the European Community is building a set of institutions to regulate competition within the European community. As part of this process it is also creating a new set of institutions for integrating capital and labour.

These trading blocs are not built in a social vacuum. As Henzler (1992) has recently argued, each is characterized by a distinct form of capitalism, Eurocapitalism being distinguished by its ability to balance economic performance with social inclusiveness. He argues that while the basic tenets of capitalism are the same throughout the world, the constraints under which companies and their senior managers operate, the degree of legitimacy they enjoy, the goals their actions must serve and the standards by which they are judged differ from region to region. In this respect he argues that American business is characterized by a commitment to free markets and the effectiveness of individual action. It does not favour collective solutions to social problems or any form of government intervention in the form of welfare provision: an orientation that has been institutionalized in the Free Trade Agreement. The fruits are expected to benefit investors. The Japanese system is distinguished by a less individualistic orientation but with a focus on the company as the beneficiary of the system.

Eurocapitalism by contrast is characterised by a social compact which maintains that the fruits of business should be shared throughout the society. This is reinforced through laws of co-determination and in the commitment of most European governments to high levels of training and education and much lower wage differentials between top management and the average worker than exist in the USA. To achieve this social inclusiveness employers expect the government to play a more active role in the provision of welfare programmes and contribute more than their American or Japanese counterparts to these social costs. What Henzler describes is a particular European way of integrating capital and labour, a set of conventions and approaches currently being institutionalized in the form of the Social Charter.

What is important about these new emerging regional structures is that they are poised to provide not just a framework for integrating product markets but a set of institutional structures which could have a powerful impact on the operation of labour markets: for example, systems of welfare, regulations governing workers' rights, and so on. Thus, the possibility is raised of the creation of transnational labour markets with common institutional provision over the next few decades. Insofar as this process gets under way then we will also see the emergence of transnational youth labour markets.

At the moment these new regional forms are only weakly developed and the major impact of the changes we are concerned with are directly on the national economy. The growing dominance of MNCs has led to increased importance being attached to firm internal labour markets which they rely on as the basis for skill acquisition and control of the labour force. However, the form taken by such internal labour markets is changing, in some instances very radically, and there is some confusion over how to conceptualize these changes. Moreover, once some of the MNCs introduce new, more effective forms of controlling labour and increasing productivity they thereby change the terms and conditions of competition. In order to maintain their competitive position, other smaller national based organizations are obliged to follow suit.

Changes in the method of organizing production within the company

Sources of change

At the level of the firm these changes have been discussed in North America under the label of "flexible specialization" (Piore and Sabel, 1984), while in the UK the debate has centred around the concept of the "flexible firm" (Atkinson, 1984; Pollert, 1988), and the "Japanization" of industry (Oliver and Wilkinson, 1988). What is common is that the debates refer to new or modified forms of organizing production.

For the purpose of this paper it is useful to identify two such changes. One is the intensification of competition associated with the entry of Japanese firms with new forms of work organization. The forms of organization developed by Japanese companies have proved to be more efficient in raising the level of productivity than the forms of bureaucratic control traditionally used by many Western organizations. They have out-performed many western companies forcing those who remain to adopt some of the Japanese management practices.

The second change has been the intensified competition associated with the growth of transnational, regional trading blocs. Organizations which may have had a virtual monopoly in their own national market now find themselves competing against other similar companies in these transnational, regional trading blocs. The result has been tremendous pressure to change their organizational structures in order to enhance competitiveness. The aim has been to increase their capacity to react rapidly to market pressures while reducing the costs of production. Hence the drive for greater flexibility. This search for flexibility has taken a number of forms (Hunter and Macinnes, 1991). Here we are only concerned with those that affect the youth labour market.

New organizational forms

In some instances these changes have taken the form of a reduction in the number of layers in the managerial hierarchy with the introduction of "flat" organizations (Kanter, 1990). In others they have been associated with attempts to gain greater flexibility in working practices from employees and a greater commitment from them, to the goals of the organization. These have been manifested in attempts to introduce quality circles, total quality management and quality of working life programmes. Not all of these have been successful but their legacy has been to leave a much greater emphasis on teamwork and flexibility among the workforce (Hill, 1991).

Contemporary research on organizations is also suggesting that the form of control used in Western bureaucracies is changing. The traditional Weberian bureaucracy that characterised western companies, was based on a rigid demarcation of jobs and a well defined hierarchy of offices. With clearly defined duties and responsibilities attached to each job, control was maintained by punishing any deviation from the expected performance. However, as the structure of organizations changes and employees are expected to be more flexible, this system of control is no longer effective. As organizations eradicate layers of management the promise of career progression loses its efficacy as a motivating factor; as jobs become less clearly defined it becomes more difficult to identify and punish those who fail to meet expectations. In these new more fluid organizational forms it is the commitment to the operating objectives of the organization that becomes more important as a mechanism of control. As employees are given more responsibility over the organization of aspects of their work, either as individuals or as members of teams, they also become responsible for motivating themselves. Control becomes internalised with the employees taking on the responsibility for monitoring their own performance. This is evident in the widespread use of appraisal systems. These enable the continuous and close supervision which characterised the traditional system of external control to be replaced by a system which encourages individuals to motivate themselves and monitor their own behaviour (Townley, 1991).

All this means that those employers who are adopting these new organizational forms are now looking for different qualities in their recruits. They require employees who have the conceptual ability to understand their role within the organization and a commitment to the values of the organization. This becomes an effective precondition for their ability to monitor their own performance. Oral skills also become increasingly important. The old requirement for workers who were obedient and disciplined and who would stand by their machine or desk

and do as they were told with no questions asked, is disappearing along with the organizational forms that generated the demand (3).

At the moment it is difficult to establish how far it is possible for employers to commit workers to the goals and values of the enterprise through the incentives and learning experiences generated by the internal labour market. This appears to be the case in Japan. However, such organizations in Japan provide a form of labour market shelter. For many who cannot obtain entry into the larger organizations, and this includes many young people, the consequence is a very insecure existence in an external labour market where the rewards are fewer and conditions of employment less attractive. In short it is not clear just how far the commitment of workers to the enterprise is dependent on the existence of a group of peripheral workers with much worse conditions in order to enhance the motivation of those in the core. If this is the case, then it may mean that the existence of what in the UK is referred to as an underclass is likely to become a structural feature of those societies which adopt the new forms of production.

These new forms of work organization are usually associated with the introduction of new technology. The introduction of automated equipment and office systems has also provided the possibility of radically altering the organization of the division of labour at the level of the firm, undermining traditional forms of job demarcation. This is a technology and form of production which requires a greater understanding on the part of the worker of the overall system of production (Hirschhorn, 1984; Baran, 1988). In order to undertake jobs effectively, employees require a greater expertise in conceptualizing the system of production if they are to respond effectively to any problem they encounter in handling their work tasks (Koike and Inoki, 1990).

While the debate over the conceptualisation of these changes proceeds, the impact of these new forms of organizing production and distribution on the workforce is becoming clear. Employers in industrial societies are starting to shift their requirements and the demand for skills is starting to change. The demand from them is no longer for those of the obedient, disciplined worker (Bowles and Gintis, 1976; Blackburn and Mann, 1979). Instead, it is being replaced by a demand for workers with the conceptual skills necessary to comprehend the production process and operate with a greater degree of autonomy, either individually or as a member of a team, guided by the objectives of the organization as a whole. Thus, what we are witnessing with the introduction of these new forms of production is an increased demand for a more highly skilled workforce (Gallie, 1991) (4).

Under these new circumstances the enterprise-specific skills acquired on the job become more central to the production process. Workers are no longer interchangeable cogs in a machine. Employers are no longer interested in the ability of the individual to perform one specific sequence of operations. Instead employees are expected to master a series of tasks while comprehending their function in the overall process of production. Thus, as the process of production becomes more complex and the learning time required to understand it increases, so too does the organization's investment in ensuring the individual's commitment to the goals of the enterprise. The result is that the enterprise starts to take on an enhanced role in the process of skill formation (Streeck, 1989). Thus, within the labour markets of the industrial societies, firm internal labour markets, albeit ones characterized by short career ladders, become more important as the basis of labour market organization and skill formation.

At this point it is important to note that we have been concentrating on changes in those organizations which are largely concerned with the production of high value added goods. Many organizations are not responding in the ways we have outlined. Instead they opted to intensify the use of the older technologies and associated forms of bureaucratic organization, intensifying the use of their workforce. In other instances companies have adopted the new technology but used it to deskill existing jobs in an attempt to maintain profitability (Kelly, 1989). Such strategies still represent a viable means of capital accumulation and maintaining profitability (Green, 1992; Mishel and Teixeira, 1992). However, the employers that use them require only a low skills input from the labour force and, in return, offer relatively low wages. Their demands for skills from young workers remain those traditionally demanded by employers, namely, basic literacy, obedience and discipline.

While we possess only limited evidence on this point, it does appear to be the case that employers will, in the absence of any external constraints, often opt for the low skills option (Harijan, 1990). This is the case particularly where performance is judged on the basis of short-term profitability. Thus, in the absence of any government pressure or help to move in the

direction of high value added production, a number of academic observers have noted that many organizations in the UK and USA have opted for quick returns from the low value added option (Green, 1992; Mishel and Teixeira, 1992).

The role of the nation state

So far, we have concentrated on the wider economic changes, and ignored the role of the state. Yet governments are not passive agents in this process. By virtue of their control over the means of force and taxation, governments play an important role in mediating the impact of these wider changes on the national economy and its institutions. They have embraced the movement to stronger regional based forms of organization with variable degrees of enthusiasm. Similarly, their responses to the challenges produced by the growth of these new organizational forms have been equally variable. Some, such as the government of Singapore, have embraced the MNCs and sought to use them as a means of moving production to higher value added products (Ministry of Trade and Industry, 1991). Similarly, the Japanese and German governments have encouraged employers to concentrate on the production of high value added quality products. Other governments, such as those of the UK and USA have opted to let the operation of market forces determine which product markets companies in their countries operate in; a strategy which appears to be pushing them in the direction of low value added products (Green 1992; Finegold and Soskice, 1988).

The ways in which individual governments respond to the challenges is influenced by their world views (Mills, 1956). This is a set of ideas or frame of reference which structures the ways in which ruling groups perceive both their own interests and the place of their society in the global political and economic arena. Such world views are conditioned by a number of factors (Mannheim, 1960) but foremost among them is the historical conditions under which industrialization took place.

The ruling elites in the UK and USA, being the initial leaders in the process of industrialization, with no major rivals, were content to leave the creation of wealth to the operation of the market (Laxer, 1987). For them the role of the state was to remove any impediment to the operation of market forces, and this was their industrial strategy. Similarly, they rarely looked to the educational or training systems as a means of enhancing the nation's competitive ability. Indeed, in the UK the ruling elite saw the education system primarily as a means of maintaining the status quo and left the industrial leaders to determine the direction of economic growth. Once these world views are formed, they are readily transmitted between generations and become difficult to change. Thus the basic tenets of such a view still characterise contemporary political elites in the UK and USA. In other Western societies such as Canada, the ruling elites have recently modified their world view and looked to a heavy investment in education to help the process of economic growth but have been content to leave economic strategy to leaders of business.

In Europe, the elites in France and Germany faced a different set of problems. They were countries which sought to industrialize in a world already dominated by the British and US industries. Their urgent task, if they were to maintain national independence was to break into the markets already dominated by the USA and the UK. Thus, the strategy adopted first by the Germans and later the French, has been to develop an industrial strategy and link that in a relatively loose manner with an education/training policy aimed at providing the base line skills necessary for an industrial labour force: the need for such a strategy being reinforced after the devastation of the Second World War when their economies had to be rebuilt in order to recapture markets.

The most recent example of such a strategy is to be found in the S E Asian NICs. There, countries such as Taiwan, Singapore and South Korea faced a much more difficult task of breaking into world markets dominated by the older industrial powers. In these circumstances, the ruling elites are far more conscious of the need to forge a very close link between their industrial and education/training strategies. Thus, in Singapore, education and training is seen as one of the major means of supporting an industrial strategy aimed at making Singapore a centre of finance and high value added production. Therefore we can see that some governments have been much more active than others in linking the provision of education and training to an industrial strategy aimed at encouraging high value-added production and the forms of organization associated with it.

Labour markets and processes of change

The other major factor which mediates the impact of these wider global changes is the organization of the labour market. We have already distinguished three different principles of labour market organization. The first is that of the occupational labour market (OLM) which has its origins in the medieval guild system. As the name suggests, occupational labour markets occur where labour is trained in a range of skills which provide competence in a specific occupation. This process of socialization usually leads to the development of an identification with the occupation, as in the case of plumbers, electricians and engineers.

From an economic perspective, these mechanisms can lead to restrictions on the supply of labour and hence the price at which it is bought and sold. It means that only those who have undergone this process of skill formation are able to compete in the labour market. However, the training involved is expensive in resources and requires the operation of mechanisms external to the firm to ensure that the costs are shared. Otherwise, those employers who do carry the costs of training will be subsidising those who do not. As Marsden (1986) has pointed out, such markets are inherently unstable and require the existence of strong institutional supports to function effectively.

Firm internal labour markets (FILM) operate, as the name suggests, within the confines of the employing organization. They comprise a series of job or career ladders. Access tends to be in positions at the base of the internal market and training is specific to the needs of the organization. The price of labour is determined either by the employing organization acting independently or through negotiations with unions and professional bodies. Movement within the internal labour market in the form of promotion is governed by the requirements of the organization and in accordance with the rules and regulations which apply within the organization.

External labour markets (ELM) are formed where the selling and buying of labour is not linked to jobs which form part of a FILM or OLM. Movement of labour is determined by the price attached to the jobs on offer and the requirements of the individuals concerned. Such jobs are often low skilled and insecure, offering little training or chance of progression and labour turnover is high. They are frequently produced by employers who adopt a low value added strategy to production. These conditions are often referred to as constituting the secondary labour market. However, external labour markets can operate for more highly skilled labour, providing the employers involved do not link them to internal labour markets.

Most national labour markets are characterized by a mixture of these three types, but usually only one type is dominant. Thus Germany is characterised by the dominance of occupational labour markets, but the larger firms all have well developed internal labour markets (Soskice, 1991). Japan, by contrast is dominated by FILMs but also has a number of OLMs in the construction industry (Dore and Sako, 1989). External labour markets dominate in Hong Kong although there are also some very well developed FILMs among the large employers. In other societies such as the UK there is more of a balance in that some sectors are dominated by OLMs and others by FILMs.

These different ways of organizing the labour market have important implications for the structure of the youth labour market. Occupational labour markets usually but not invariably involve the recruitment of young people for training directly from school. They also have important implications for later movement in the labour market as well as for the structure of authority within the enterprise (Maurice et al, 1986). Firm internal labour markets are not so reliant on youth labour and youths frequently compete with older workers at the point of entry. Similarly, in external labour markets, youths frequently compete with adults for jobs.

What are the consequences for the youth labour market?

The impact of the trading blocs

We are now in a position to examine the ways in which these pressures for change have affected and been dealt with in a number of industrial societies. As there are few comparative studies of youth labour markets the following discussion will draw on a number of case studies making comparisons wherever it is meaningful to do so.

In the case of the European societies the emergent trading bloc in the form of the European Economic Community is likely to have a major impact on the general labour market. The introduction of the concept of social partnership and the Social Charter is producing a different form of integration between capital and labour, based on the concept of the social partnership discussed above. By contrast the North American Free Trade Agreement is pushing institutional reform in North America in the direction of greater individualism and threatening to move existing forms of collective welfare provision in Canada towards those prevailing in the USA. Of course, this process is still in its early stages and may not have a direct impact on the youth labour market until the beginning of the next century.

In Europe the fact that the European Community is attempting to integrate "old" societies with distinctive forms of education, training and labour market organization will mean that it will be a long time before the institutional structures are unified. For example, France is dominated by FILMs and Germany by OLMs while the UK has a mixture of the two. As a result each society has its own forms of training and certification based on these different principles of labour market organization which will take many years to integrate: the French based on educationally-based vocational qualifications; the Germans on workbased apprenticeship qualifications; and the UK on a mixture of academic and competence-based National Vocational Qualifications. At the moment there is a political struggle within the community about which system will dominate. Any future reform will of course have important implications for the structure of training and the operation of the youth labour market.

In North America the integration may proceed more rapidly because of a greater similarity between the principles of labour market organization in Canada and the USA where FILMs predominate. Yet even here there are different forms of certification which will require rationalization to ensure the free movement of labour.

The impact of new forms of work organization

At the level of the firm, the effect of the creation and spread of new organizational forms has been twofold. It has enhanced the significance of firm internal labour markets while at the same time introducing more flexible organizational structures.

For the reasons discussed above the introduction of the new forms of organization has enhanced the significance of firm internal labour markets in all industrial societies. In France it merely reinforces the already existing dominant form of labour market organization. In Germany by contrast it is being imposed on a labour market which was dominated by OLMs. Research suggests that the German system of training based on OLM is being adapted by the larger organizations to suit their needs. Effectively the dual system is being differentiated into a two-tier system. The older OLM is feeding young people into traditional occupational labour markets based on the smaller businesses. However, above this in terms of prestige and reward are apprenticeships in larger organizations which provide employers with the chance to select young workers for their internal labour markets where they are likely to remain for a good part of their working lives (Soskice, 1991).

By contrast, in Austria which has a similar apprenticeship system to that operating in Germany, larger firms have opted out of the apprenticeship system and tend to cream off the more able young school leavers taking them directly into company-specific forms of training. This leaves the apprenticeship system to provide training only for the smaller firms. There has been a similar trend in the UK where the larger firms have tended to opt out of traditional apprenticeship training and introduced more firm-specific training. This has contributed to the further decline of the apprenticeship system which, because it does not have the strong institutional supports evident in Germany and Austria, has tended to wither away. As a result, those young entrants to the labour market who cannot obtain access to training for FILMs are left to the vagaries of the external labour market.

In Canada, the growing significance of FILMs has not created any major change as the apprenticeship system was already incorporated by many of the larger firms into their internal labour markets, albeit in a different manner to that used by firms in Germany. German firms use the apprenticeship system as a probationary period and a means of selecting the best candidates for their internal labour markets. However, in Canada it works the other way round. There the later age of entry to the apprenticeship system means that employers have the chance to observe potential candidates from those who join on leaving college before offering them an apprenticeship.

As we pointed out above, the new organizational forms are also impacting on the labour market by creating a demand for new skills specific to the enterprise.

These involve knowledge of the organization, its production system and the objectives of the organization in addition to any technical skills. Moreover, these are skills which can only be built up over a period of years (Soskice, 1991; Koike and Inoki, 1990). This means that the new organizations cannot take in young people from the external labour market and place them into job slots where they can be immediately productive. No matter how well trained they have been in schools or colleges, to operate effectively in these organizations, new forms of knowledge and skills are needed which can only be acquired on-the-job. In these circumstances the enterprise acquires a far more significant role in the process of skill formation than it has had hitherto. This means that industrial societies which pursue a high value-added route may no longer be able to transmit work-based skills through the formal education system.

Thus, if it continues, this trend will start to call into question attempts made in some societies to prepare young people for work through the agencies of a formal system of education. No matter how well trained they are at school or in college, they will not be in a position to acquire the skills necessary for work outside the context of the organization within which those skills are embedded. Much greater emphasis is being given to the workplace as a central component in the process of skill acquisition. In some instances this may mean recognizing skills acquired in the workplace as an essential part of the learning process and developing forms of certification through which they are recorded (5).

As these new forms of production are being introduced, one of the consequences has been to heighten employers' awareness of the need for better integration of the learning which takes place at school and work, hence the trend in many industrial societies for greater co-operation between schools and industry. In the UK this has been manifest in employers' involvement in a number of schemes such as Compacts, but such schemes represent only a fraction of the more informal contacts between schools and education. There is also a growing awareness of the necessity for such changes on the part of teachers as evidenced by schemes for the secondment of teachers to industry and the growing use of work placements as part of the curriculum. In France the same underlying pressures were responsible for the increased use of work placements by pupils in colleges and the recent introduction of the vocational baccalaureat (CEREQ, 1992). In Germany the apprenticeship system already provided a medium for the integration of school and work-based learning. Within the European Community there have already been attempts by CEDEFOP, the vocational training agency, to define what is referred to as "Alternance Training" (meaning linked work and training schemes) as the new form of training characteristic of community members (Sellin, 1991).

A further consequence of the introduction of new forms of organization and the new technologies associated with them, is a change in the type of skills employers demand from their employees. Earlier we identified three different types, the greater emphasis on teamwork associated with new working practices and organizational forms, the demand for problem solving abilities necessary for workers to exercise greater autonomy and the enhanced level of conceptual skills necessary to tackle problems generated by new technology and to locate immediate tasks within the context of the broader objectives of the organization.

However, it is important to note that the signals sent out by employers are not unambiguous. Those employers who continue to operate with traditional forms of organization and technology will continue to articulate the demand for low skilled, literate but obedient and disciplined workers. This is especially the case in those societies in which low valued added forms of production remain as a major part of their productive base.

The educational system and the youth labour market

We now turn to examine more closely how educational systems have responded to these changes. So far they have been depicted as responding in a relatively passive way to the demands of the employers. However, this can be misleading because the organization of national educational systems plays an important role in determining how the youth labour market is organized. In addition the national system of education and training can be a powerful instrument in shaping the employers' response to opportunities for adopting the new forms of higher value added production.

We have already seen how the interaction of the educational system with the other forms of organization gives the youth labour market its distinctive characteristics. In those societies where the educational system has a high degree of autonomy in relation to the labour market,

its ability to counter cyclical fluctuations in the demand for youth labour may be limited. Thus, in France the educational system is used to provide a general system of academic and vocational education, producing young people who are fed into companies' internal labour markets. This gives the educational system a high degree of autonomy in relation to the employing organizations. As a result the educational system is unable to respond rapidly to cyclical changes in the demand for youth labour. Moreover, because employers rely on internal labour markets, there is a tendency in times of recession to cut recruitment as a means of protecting existing employees. The result is high levels of youth unemployment (Garonna, and Ryan, 1992).

This situation contrasts with that in Germany where the linkages are much closer, with the educational system feeding 80 per cent of young people into the apprenticeship system where education and on-the-job training are combined. Because this training system is based on the principle of OLM, it is regulated by agencies external to individual employers. This enables the numbers coming through the system to be expanded to absorb cyclical fluctuations in the demand for youth labour.

The Canadian case is interesting here because although the educational system has a high degree of autonomy in relation to employment and industrial relations systems, its institutional flexibility has enabled it to accommodate more effectively the cyclical fluctuations in the demand for labour. In Canada, the educational system is based on wider N American principles of modular provision which enables young people to combine education and work from a relatively early age. This meant that as the external labour market developed in the service industries, offering low skilled, low wage employment, employers could utilise this college-based pool of labour. From the perspective of youths, this type of work provided additional income to support their participation in an active youth culture. At times of cyclical downturn the use of part-time work and enhanced educational provision enabled Canadian youth to avoid the worst of youth unemployment experienced in France and Britain (Ashton and Lowe, 1991).

The educational system in the UK is something of a compromise between the relatively autonomous system of vocational provision characteristic of France and the employment-based apprenticeship system of Germany: traditionally, a fairly rigid academic form of provision for the elite combined with a form of apprenticeship provision for the 'cream' of the early school leavers. In general the educational structures governing course provision have been more rigid requiring full-time attendance so that when the new external labour market, service sector jobs were developed, youth labour was not available to employers, leaving them to look to married women (6). The system proved particularly vulnerable to cyclical fluctuations in the demand for youth labour. The weak apprenticeship system was not capable of absorbing fluctuations in the demand for labour and the educational system did not have the institutional flexibility of the Canadian. The result was mass youth unemployment and the establishment of a work-based government training scheme to absorb the unemployed. Given the significance of institutional structures which characterize national systems, then we are likely to see continuing differences in the ability of national youth labour markets to absorb fluctuations in the demand for youth labour.

At the level of individual experience, there is every reason to believe that in the next decade the existing forms of education and training provision will also continue to represent a powerful influence in structuring experience of the transition. The kind of findings described by Bynner and Roberts (1992) in their comparison of British and German youth will continue to characterise the experience of youth in the two countries. However, like labour markets, educational systems will continue to evolve and hence changes here can have a significant impact on structuring the transition. In this respect we can already see the direction of change likely to occur in a number of societies, especially in those societies in which governments use the educational system in a pro-active manner as a means of enhancing the country's skills base and encouraging employers to follow the high value added production route. This is a strategy adopted by the government of Singapore on the assumption that the availability of highly educated/skilled labour will encourage employers to follow the high value added route.

This is also the case in France where the French government, in response to the demand for a higher level of intermediate skills, has set a target of 80 per cent of the school leavers achieving a Bac. One of the arguments for such a policy is that employers will only choose to locate their investments in those countries which have a large pool of relatively highly educated labour. It is also argued that existing employers will only adopt the new forms of production if the appropriate skills base is present, otherwise the new technology may well be used to deskill and continue with low value added production. However, whether or not the

strategy is successful in encouraging employers to move in the direction of producing high value added goods and services, it will certainly impact on the transition to work as young people find their stay in the education system extended, or the theoretical content of their training enhanced.

The experience of Canada is instructive in this respect. Having invested heavily in their educational system in the 1960s the Canadian government has created a flexible system capable of producing a high proportion of university graduates.

However, this may not have been sufficient to encourage employers to invest in the new forms of production. One consequence has been that although the educational system has played an important part in achieving other policy objectives such as integrating women into the labour market, it has overproduced graduates leading to problems of under-employment (Krahn and Lowe, 1991). Put another way, the availability of highly qualified labour has not been sufficient to encourage large enough numbers of Canadian employers to adopt a high value added strategy.

In the UK the government has expanded the proportion of the population who graduate, but little has been done to enhance the intermediate level skills of the labour force. Meanwhile many employers continue to utilise traditional forms of production and rely on low skilled labour. This together with high levels of youth unemployment has created a large reservoir of semi-skilled and unskilled labour on which employers following the low value added route can draw on.

What all this tells us about the future of the youth labour market is that unless changes introduced into the education system are related to broader changes in the structure of employment opportunities, then problems of under-employment are likely to be experienced by European societies. This may be especially the case in those societies where the educational system has a high degree of autonomy from labour market institutions and where governments rely exclusively on educational reforms only to enhance the skills base of the labour force. For unless employers are also persuaded to opt for the production of higher valued added goods and services there will be insufficient demand for such skills. In this scenario a large proportion of young people will be destined to enter external labour markets and the unskilled and semi-skilled jobs associated with the production of low value added goods and services.

Conclusions

Much of the contemporary debate on the transition is understandably focussed on the structure of the education and training institutions. Yet we know that the outcome of the transition, in terms of the opportunities

available to young people in the labour market, is determined not just by those institutions but the success of the economy in the struggle for world markets. Whether young people obtain a job, and what kind of job they obtain, depends not so much on their efforts as the decisions of the business elite and the success of governments in delivering high levels of economic performance. Thus, if we are to understand the outcomes of the transition we must incorporate a knowledge of the process which determine the nature of those outcomes into our conceptual framework(7).

There is a danger in any such attempt to identify the impact of structural change on the youth labour market that we may fall into the trap of structural determinism. In view of this, it is important to stress that there are three major areas where there is significant scope for human action in determining the direction of change. The first is within the context of the new trading blocs. Individual governments are still engaged in the process of negotiating the form of these agreements. Consequently there is still room to ensure that the rights of (youth) labour are safeguarded. In addition, political elites still have considerable autonomy in terms of how they mediate the impact of the new forms of production within the national economy. If they decide to follow a high valued added industrial strategy this is likely to introduce further change in the youth labour market, as skills required of new entrants are enhanced. Moreover, once a commitment has been made to the high value added route then there is considerable pressure generated to ensure that those entering the labour market are suitably prepared and that employers fulfil their obligations in sustaining the process of skills formation. For the young people, the main demand for their labour will be in jobs which demand a high level of

conceptual and social skills as well as technical knowledge and which offer the prospect of continuous learning.

If governments decide not to follow that route, and let the markets decide which industries are developed, then there is less political pressure to enhance the quality of the initial education and training of those entering the labour market. Capital can still be accumulated through labour intensive low value added production. In this case there will be few pressures from employers for improvements in quality of those entering the labour markets. The main demand will be for literate, obedient workers. As for the young people, they are likely to find their future employment prospects confined to the external labour market in low paid, semi-skilled jobs interspersed with periods of unemployment.

Notes

- 1) It should be noted in such comparisons that the German scheme is larger and more permanent than the UK Youth Training Scheme. The latter was reduced in size and scope during the early 1990s as it was transformed into Youth Training into which entry is now far more selective.
- 2) While Japan has traditionally dominated S E Asia, it is important to note that the S E Asia NICs are starting to form their own distinctive group, capable of generating their own capital and with their own distinctive form of business organization (Lever-Tracy and Tracy, 1992). In addition, the Eastern bloc countries may also be forming a fifth group, although this is still in the very early stages.
- 3) The evidence for this statement is drawn from recent interviews with employers undertaken by staff at the Centre for Labour Market Studies.
- 4) There is of course considerable controversy over the extent to which changes in the organization of work are contributing to the upskilling or deskilling of the labour force. However, there is little hard evidence, apart from the work of Gallie (1991), but this only refers to employees' perceived differences in the level of their skill. It should also be noted that the point made here does not preclude the operation of processes of deskilling in certain sections of the labour force.
- 5) This is what the British National Vocational Qualifications and other competence-based qualifications are trying to do.
- 6) As the schooling system becomes more flexible and young people stay at school longer, employers are now turning to them for recruitment into these jobs.
- 7) There are a number of other factors which influence the operation of the youth labour market and which have not been discussed here. These include the basic demographic factors concerning fluctuations in the supply of young people to the youth labour market; the level of demand for labour in the general economy and the prevailing price at which labour is bought and sold. There has been no intention to minimise the impact of these factors on the operation of specific youth labour markets at any one point in time. However, the concern here has been to identify the major changes that are likely to affect the institutional structure of the youth labour market and the career trajectories of those young people who comprise it.

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Different Systems of Vocational Training and Transition from School to Career

The German Dual System in Cross-national Comparison

Introduction

All modern industrialized countries are confronted with an increasing rate of change in the labour market. In particular, new job qualifications are being demanded of members of the working force with accelerating speed and customary occupations are fast disappearing and being replaced by new ones. As a result, an increasing tension between the requirements of the occupational structures in modern societies and their structures of vocational qualifications distributed among the employed population can be observed (Ryder 1975; Janossy 1968). These disparities manifest themselves in labour shortages in particular occupations or in an excessive supply of workers with specific skills and qualifications (and their unemployment rates).

As highly developed market economies have accepted and even institutionalized (Haller and Müller 1993) continual technical and organizational change, adjustments to the changes of the occupational structure can be achieved basically in two ways (Janossy 1966): First, the already employed population can acquire new knowledge and skills through further education or retraining, and secondly, new entrants into the labour market can take up new jobs, while workers leaving the labour market simultaneously leave old ones. Despite the fact that in all modern societies the adjustment of qualifications to occupational demand is carried out in both ways, empirical investigations of longitudinal data have shown that the greatest change in occupational structure has been accomplished by the entry of young people into the labour force and the retirement of old people (Müller 1978; Kaufmann and Spilerman 1982; Blossfeld 1989; DiPrete 1993). Young people tend to enter new jobs, created by technical innovations and developments; old people leaving the labour market were often employed in occupations and industries which have become less important for economic development. Generational replacement allows a particularly radical form of change in occupational structure because young people entering the labour market have total new access to the occupational structure (Ryder 1965). For this reason vocational training systems have gained importance for modern societies in dealing with the rapid change in the labour market.

Historically, modern countries have developed various vocational training systems which are closely connected with more general national models of how qualified persons are matched to jobs (Blossfeld and Mayer 1991; Müller 1992). Particular educational systems are related to specific types of job mobility (cf., for example Lutz 1976; König and Müller 1986; Haller 1989; Allmendinger 1989a, 1989b) and give education a country-specific importance for the attainment of social status and income (Blossfeld, Hannan and Schömann 1988; Schömann 1992), the formation of in-plant hierarchies and personnel structures in firms (Maurice, Sellier and Silvestre 1979; König and Müller 1986), the organization of work (Haller 1989), and the differentiation of labour markets (Blossfeld and Mayer 1989). Systems of vocational training in modern societies can, therefore, not be understood in isolation, but must be considered in relation to the more general organization of the educational system and in connection with the nation-specific employment system (Blossfeld 1990a).

The purpose of this paper is to compare the German dual system with other systems of vocational training in Western European countries and the United States and to specify the advantages and disadvantages of the German dual system for the transition from school to work and job mobility in modern societies.¹

1. Cross-national comparison of different systems of vocational training

Since the fundamental relationship between the educational system and the occupational system is moulded by the basic economic and political model of a country, I will limit my discussion to *western countries with a market economy and a relatively high level of industrialization*.

In these countries today, vocational training is heterogeneously organized. It is carried out in general schools, vocational schools, training centres, the so-called dual system, or in the form of simple on-the-job training at the workplace. Different types of vocational training have varying degrees of weight in different national training systems. For example, in France the greater part of vocational education takes place within the general educational system (Maurice et al, 1979; CEDEFOP 1981), whereas in Denmark, the Federal Republic of Germany and other German speaking countries the dual apprenticeship system is the dominant type of vocational training which leads to a clear separation between general education and vocational training (König et al, 1987:87). In the Netherlands, Luxembourg, Belgium and Sweden vocational training essentially takes place in vocational schools (CEDEFOP 1981). Finally, in Italy, the U.K., the Republic of Ireland and the United States many occupational beginners enter employment life directly and acquire occupational qualifications through on-the-job training at the workplace (CEDEFOP 1981).

Although one can observe "basic models" in the organization of vocational training in these different countries, there is, nevertheless, in all of them a complex coexistence of many types of school-based and workplace-related vocational training forms which has also changed over the last few decades. In this paper, it is impossible to give an exhaustive description of all these different combinations of vocational training across countries. Instead, I will compare the German dual system with other models of vocational training on the basis of three selected dimensions. These dimensions seem to me particularly important for an understanding of the relationship between vocational training system and how workers are matched to jobs in various countries. These dimensions are: (1) the *school- and workplace-relatedness* of vocational training (Benner 1982); (2) the *standardization* of vocational training (Allmendinger 1989a, 1989b); and (3) the *stratification* of vocational training (König and Müller 1986; Müller and Karle 1993).

1.1 The workplace-relatedness of vocational training

First of all, vocational training systems in different countries can be compared with respect to the way in which they combine *theoretical learning with practical work experience* (Benner 1982:54). At one end, we have the general educational and vocational schools, where the trainee is not confronted with real-life occupational problems and obtains qualifications mostly on the basis of theoretical instruction, as is the case with full-time vocational schooling in France (Erbes-Seguin 1990:17). But at the other end, on-the-job training prevails, giving the trainee the opportunity to acquire all of his qualifications without any theoretical instruction, solely through the solution of real problems in a concrete workplace, as is often the case in the United States, the U.K., or Italy (Hamilton 1990; Bynner 1990; Benner 1982).

Between these two extremes lie the various combinations of schooling and on-the-job training. For instance, the predominant school-based training with in-plant practical work experience, as for example in the technical middle-grade secondary school in the Netherlands, or the in-plant training with part-time vocational school of the dual system found in the Federal Republic of Germany, or the government-sponsored vocational training via skill-centres in the U.K.

Different combinations of theoretical learning with practical work experience during the phase of vocational training have implications for *workers' occupational competence at career entry and their flexibility in adjusting themselves to new occupational requirements over the later career*. On-the-job training as such certainly will promote the acquisition of skills that are closely connected with the requirements of a *specific workplace at career entry*. Its advantage is that many important occupational experiences can only be made by the real-life situation

of the concrete workplace (Drexel 1990:26). Furthermore, the firm and the workplace represent valuable learning environments that cannot be substituted by the school (Hamilton 1990). These short-term advantages of on-the-job training at the time of career entry, however, are coupled with the long-term disadvantage of *low individual flexibility*. Since the acquired skills are very workplace-specific and are closely tied to concrete worktasks, they will soon become obsolete due to rapidly changing occupational requirements and the shorter life-span of occupations.

Theoretical learning in vocational schools, on the other hand, will promote a *broad theoretical understanding* of occupational activities and be connected with *more general education*. In particular, it will enable workers to adjust more easily to the changing requirements of the occupational structure. In all modern societies, there is empirical evidence that the participation rate in further training programmes is strongly influenced by the level of general qualification (cf., for example, Becker 1991). Theoretical learning in vocational schools, however, has the disadvantage that it *does not confront people with real work situations and neglects the learning environments of firms and working places*. The ability of trained workers entering the labour market to fulfil autonomously specific tasks at concrete workplaces will therefore be low and the acquirement of practical experience will be shifted to the period after the phase of vocational training.

Based on this discussion, it is obvious that both the purely school-based vocational training model as can be seen in France and the purely on-the-job training model often found in the United States, the U.K. or Italy, have disadvantages. In modern societies marked by an increasing rate of occupational change, it seems to be advantageous to organize vocational training through a combination of theoretical learning and practical work experience. The growing popularity of the German dual training system in other Western European countries is, therefore, partly accounted for by the fact that this system offers a *pragmatic compromise* of theoretical learning and job experience for a large number of occupations. In the German dual system the dominant practical in-plant training is combined with theoretical learning in vocational schools. The task of vocational schools is to complement practical experience in the workplace by giving it a theoretical basis together with some general education. Certainly, the coordination of theoretical school-based learning with practical workplace training - as is the case with all the various combinations of school-based and workplace training in general - is one of the areas in need of continual improvement in the German dual system (Lempert 1990).

Although the dual system of the Federal Republic of Germany clearly emphasizes the practical in-firm training, the school-based elements of vocational training have also been strengthened in the past decade. In particular, a strong system of trainee and joint-training workshops has been developed. In the Federal Republic today, joint instruction schemes are used by over 60 % of craft firms, and in-plant instruction is utilized by about 40 % of the industrial and commercial firms (Arbeitsgruppe Bildungsbericht, Max Planck Institute for Educational Research 1990:344). It is for this reason that in the dual system the in-firm training also implies the acquisition of more general workplace skills and knowledge that increase the individual flexibility of the trainee, which will be demanded over the work career by the progressive rate of change in the occupational structure.

1.2 The standardization of vocational training

A second dimension according to which different vocational training systems can be compared is the extent to which vocational training conforms to the *same standards and access to jobs is based on training certificates* (Allmendinger 1989a; Haller 1989). At one end of this dimension lies the training in vocational schools and in the dual system. In the latter, both the theoretical and practical sides of training are highly standardized and training ends with a recognized certificate which serves as a precondition for entry to specific jobs and occupations, as is the case in Germany (König and Müller 1986; Haller 1989; Allmendinger 1990). At the other end of this dimension lies the totally uncontrolled on-the-job training where in-firm training takes place without general guidelines with regard to the quality of instructors or curricula, and where training does not end with a generally recognized certificate. This is the case, for instance, in the United States, the U.K. and Italy (CEDEFOP 1981; Haller 1989; Allmendinger 1989; Hamilton 1990).

Between these two extremes lie the various school and work-based vocational training schemes with different degrees of standardization. France, which integrates vocational training programmes into the general educational system, could be considered between these two extremes because school-based training is highly standardized, but the post-school part

of training at the workplace takes place under unstandardized conditions with no recognized final certificate (especially for jobs of a highly manual character) (Erbes-Seguin 1990).

Different grades of vocational training standardization have strong implications for the *occupational organization of the labour market and job mobility*. A vocational training system that is characterized by highly standardized conditions for well-defined occupational titles has the advantage that the acquisition of job qualifications can socially best be ensured by a certificate. The information value of such a certificate, of course, is determined by the observance of particular quality norms which guarantee usefulness of those qualifications for all firms. Employers can then use certificates as an indication of particular employment possibilities for employees (Spence 1973), and employees can use them as a reference point in defining their social status in collective and individual negotiations with employers (Krais 1979:25). The disadvantage of such a system in a world of growing change in the occupational structure is, however, that it leads to a close coupling of certificates and occupational opportunities with a high degree of rigidity and a reduction of job mobility.

Completely uncontrolled on-the-job training, on the other hand, has the advantage that workers are not so much restricted to narrowly defined occupational fields (*structural flexibility*) and that new generations of entrants can flexibly be directed to new and future-oriented occupational fields (*generational flexibility*). The disadvantage, however, is that the quality of training is very heterogeneous because training conditions are not controlled and standardized across firms. Furthermore, if workers move from one job to the next between firms, neither workers nor employers can rely on shared definitions and standards with respect to skills, income, and job requirements. This increases the risk for workers (in terms of income, job standards etc.) to move between firms and makes it more likely for employers to recruit the wrong person for a specific job. The consequence is that such a system fosters intra-firm mobility and reduces between-firm mobility. For large companies with great internal labour markets, this may not be a serious problem, but for small and medium-sized firms this type of model may lead to friction.

Based on this argumentation, it follows that the unstandardized on-the-job training with no recognized final certificate (as is often the case in the United States, the U.K., Italy or France) (Bynner 1990; Hamilton 1990; Erbes-Seguin, Gilain and Kieffer 1990) and the highly channelling occupationally-specific dual system in the Federal Republic of Germany are organizational solutions with high costs for job mobility in modern societies (Hamilton 1990; Lempert 1990). On-the-job training leads to closed internal labour markets and the dual system leads to closed occupation-specific markets. Modern societies, marked by rapid change, however, need institutional arrangements that allow a standardization of vocational skills and qualifications on a supra-company level without making workers inflexible. In particular, this means that the German dual system must be made structurally more flexible in the future.

In this respect, the main problem in the German dual system is the large number of different training occupations and their mutually exclusive character. This tends to lead to inflexibility and a lack of occupational mobility later on in working life (Blossfeld 1985b, 1989). All international comparative mobility studies that include the Federal Republic of Germany show that the degree of mobility between occupations and sectors in the Federal Republic of Germany is lower than in other countries (Carroll and Mayer 1986; König and Müller 1986; Erikson and Goldthorpe 1985; Mayer and Carroll 1987; Haller 1989; Allmendinger 1989a; Mayer et al., 1989; Featherman, Selbee and Mayer 1989). During the last two decades, however, efforts have been made to de-specialize training in various occupations with the introduction of a relatively broad and general basic occupational education leading to a more specialized training after a minimum period of one year (Lempert 1990). This new type of dual vocational training qualifies trainees for a broad spectrum of occupations, encourages occupational mobility and directs the occupational entrants in a flexible way into new developing occupations.

Fundamental elements of the German dual system should, however, be retained during this process of de-specialization. First, it is important that the German dual system of vocational training not be governed solely by the state. It should instead be the outcome of a complex process of coordination between the state, employees and employers' associations (Erbes-Seguin 1990). The very different interests involved in vocational training plans can, in this way, be adequately taken into consideration. Second, it is very important that the observance of the quality standards of the firms which train people and the minimum requirements of training activities are guaranteed (Lempert 1990). Thirdly, it is important that the qualifications of trained people are highly regarded by the employers, and this can be achieved by stressing

the inclusion and involvement of employers in the process of vocational training (Lutz 1976). For the employees on the other hand, the recognized educational certificates of the dual system also implies a high degree of social security (Benner 1982). This means that skilled employees in Germany are often entitled to a specific wage according to their qualifications, that they are not obliged to accept employment below their qualifications for a certain period of time, that they have access to training and retraining schemes, and that they are entitled to occupational invalidity insurance benefits in case of unemployment.

Finally, in comparison with other countries, the dual system of the Federal Republic of Germany has one great advantage, and that is that it allows a large number of young people make a *smooth transition from the general educational school system to the employment system* because this vocational training system feeds directly into the job system (Blossfeld and Nuthmann 1989; Erbes-Seguin 1990; Bynner 1990; Hamilton 1990). In countries with a strong orientation towards on-the-job training, such as the U.K. or the United States, or countries where training on-the-job after vocational school takes place under uncontrolled conditions (e.g. France), this transition often lasts several years and is characterized by a high level of job insecurity, frequent change of workplace, a high degree of part-time employment and a high rate of unemployment (Bynner 1990; Erbes-Seguin 1990; Hamilton 1990).

Although the German dual system is already highly standardized compared to other countries, there is still a great variation in the quality of training between firms. Differences can be observed especially in so far as the training is systematic, the trainee is confronted with tasks for which he/she is not trained, and that he/she must practice the work virtues such as discipline, diligence, and orderliness at the expense of creativity, independence, and the chance to cooperate in the workplace (Arbeitsgruppe Bildungsbericht, Max Planck Institute for Educational Research 1990:344). A recent investigation made by the Federal Institute for Occupational Education shows, for example, that training in large firms and in firms falling under the control of the Chamber of Commerce is better planned and more systematically organized than in small firms and craft enterprises. However, craft enterprises and small firms have less difficulty in guaranteeing the completeness of the training (Damm-Rüger, Degen and Grünwald 1988). Moreover, in the German dual system, differences between firms are even greater than differences between occupations. "There are occupations in which young people receive a good training, where they are systematically and comprehensively qualified, and where they are confronted with the latest technology (this includes banking and insurance employees and mechanical fitters), where-as, for example, mechanics, carpenters, bakers and bricklayers are often badly trained." (Arbeitsgruppe Bildungsbericht, Max Planck Institute for Education Research 1990:344).

1.3 The stratification of vocational training

Finally, vocational training systems in different countries can be compared from a hierarchical point of view in so far as it *differentiates between the unskilled and semi-skilled workers* on the one hand and the *occupationally trained* on the other, and in as much as it gives *trained workers the opportunity to climb the job ladder* (Haller 1989). At one end of this dimension lies the more or less open on-the-job training where there is no barrier between unskilled, semi-skilled and skilled workers, and where the career perspectives of the trained are heavily dependent on the quality of the on-the-job training in a specific company, as is often the case in the United States, the U.K. or Italy (Benner 1982; Bynner 1990; Hamilton 1990). According to Oppenheimer (1989), in the United States youth employment in unskilled jobs exhibits low retention rates over a five-year period and the great majority of leavers move to career or career-entry jobs later on. She calls these jobs therefore "youthful stopgap jobs." (Oppenheimer 1989). At the other end of this dimension lies the training in the dual system where there is a clear division in job opportunities between the untrained and the trained, and where the trained have a common basis for further qualifications as master craftsmen and technicians, and also often as technical college engineers, as is the case in the Federal Republic (Krais 1979; Drexel 1990).

Between these two extremes lie various degrees of openness. For instance in France on the one hand it is quite normal for unskilled and semi-skilled workers to be classified as skilled manual labour on the basis of their year-long job experience (Erbes-Seguin 1990), but on the other hand, school-based educational training is rarely the basis for an occupational career (Krais 1979; Haller 1989).

If one again argues that the best way to *socially ensure the acquisition of qualifications is by a certificate* (Spence 1973; Krais 1979), and if it is true that further individual educational investments can best be motivated through upward mobility (*hierarchical flexibility*) (Drexel

1990), and that the proportion of unskilled jobs decreases as a result of change in the occupational structure, then vocational training systems in modern countries must provide both: (1) the opportunity to enter vocational training over the whole life course (*training flexibility*); and (2) the chance to make occupational career steps that are connected with certificates (Blossfeld 1989). Hence, the rather "fateful" and uncertified on-the-job training and the "dead-end" career vocational school system in France have disadvantages and the institutional arrangement of the German dual system seems to be more advantageous. Although it is true that even in the German dual system, some skilled workers are employed in semi-skilled positions after they have completed their training (i.e. positions which do not correspond to the training they have received) (Hofbauer 1983), in comparison with other countries with on-the-job orientation, however, in Germany downward occupational mobility is, nevertheless, rather rare and upward mobility is the general pattern (König and Müller 1986; Blossfeld and Mayer 1988).

The German dual system, however, is being confronted with an important problem. Educational expansion has led to the displacement of formally less qualified workers by formally higher-qualified workers over the last decades, and has clearly reduced the career opportunities of the man who has "come up the ladder" (Blossfeld 1985, 1986). Formal school and university qualifications have become an increasingly important factor for access to high-level jobs involving planning and direction, and have devalued the experiences of vocational training and job career (Lutz 1989). In this way, vocational training in the dual system threatens, as in France, to lead to a dead-end in career mobility. For this reason the dual system must be reintegrated into the changed structure of the educational system and must provide motivated young people with an alternative practice-oriented career path (Drexel 1990).

Another problem of the German dual system is that it produces a differentiation over the life course between the unskilled and semi-skilled workers on the one hand and the vocationally trained on the other (Blossfeld 1993). This is in sharp contrast to countries such as Italy, U. K., or the United States of America, for example, where vocational training is organized on the basis of on-the-job-training. In these countries, not having acquired vocational training at the beginning of the career bears little relation to the "adult" vocational career, and employment without vocational training will provide uncertain clues as to a person's long-run socioeconomic well-being because people can relatively easily acquire vocational skills via on-the-job training (Oppenheimer 1989).

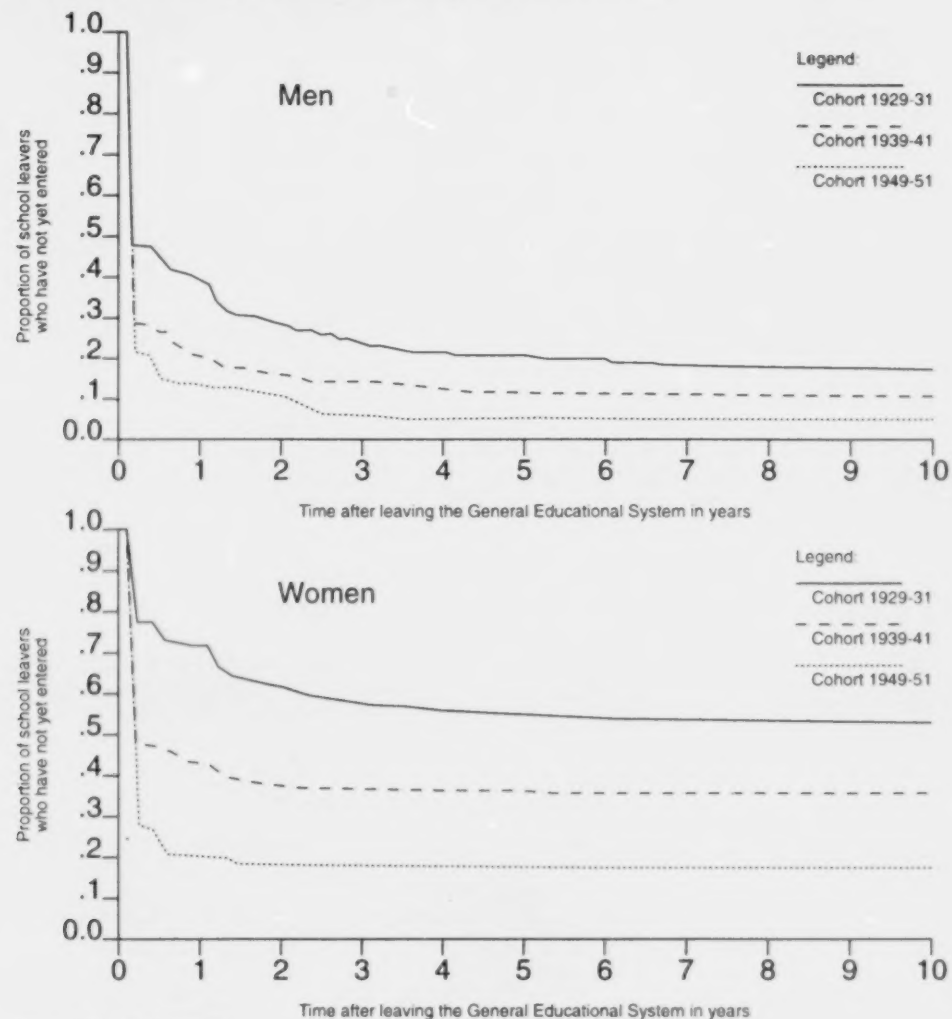
In Germany the process of entering vocational training is more or less limited to a short period of two or three years, during which historical events and developments strongly determine the proportion of each generation that enter into the vocational training system. Figure 1 demonstrates this for three birth cohorts and for men and women (Blossfeld 1990). It shows the proportions of school leavers who did not enter the German vocational training system for every point in time after they left the general educational system. The curves are very different for the three birth cohorts and for men and women. In particular, after a period of two or three years, the curves run more or less parallel to the time axis. This means that there are no further entries to observe after this short transitional phase.

Figure 1 shows that about 50 % of the men in the 1929-31 birth cohort started vocational training immediately after they left the general educational system. An additional 27 % of these men undertook vocational training within three years of leaving the general educational system. But about 23 % never entered vocational training. In comparison, about 71 % and 79 % of the men in the 1939-41 and 1949-51 birth cohorts, respectively, began vocational training immediately and an additional 14 % of the men in both cohorts started within three years. Only about 15 % of the men in the 1939-41 cohort and about 7 % of the men in the 1949-51 cohort never entered vocational training.

For women, these differences were even more pronounced. Within three years of leaving the general educational system, 40 % of the women in the 1929-31 cohort, 60 % of the women in the 1939-41 cohort, and 80 % of the women in the 1949-51 cohort undertook vocational training. These results also show that women in particular carried the burden of the immediate postwar social and economic crises but also profited more than men from the rapid economic recovery.

In summary, entries into the German dual system are hardly postponed beyond what I have called a "vulnerable" life phase of about two or three years after leaving the general educational system. Individuals' careers are directed to vocational training relatively early and are hard to change later on. For example, the tremendous increase in the proportion of trainee positions and applicants for these positions until the early 1970s had almost no effect on the

Figure 1:
Process of Entering Vocational Training in West Germany



Source: Blossfeld (1990b)

process of entering vocational training for the 1929-31 cohort (figure 1). It was not possible for members of this cohort to stop their life course and to resume their educational careers when the trainee positions became more numerous. One can, therefore, say that in the German dual system a temporary lack of trainee positions is not only a short-term problem, but it has long-term lifecourse effects on many people. There is a long-term disadvantage for specific birth cohorts because it is difficult to acquire vocational degrees in later life stages when one is more removed from the institutions of vocational training and has additional social commitments (such as maintaining one's own home, marriage, and children) that make entering into the institutions of vocational training more and more unlikely. Hence, one finds in Germany relatively disadvantaged generations, such as the cohorts born around 1930 who completed their training in the immediate postwar period, or the large birth cohorts that crowded into vocational training at the beginning of the 1980s. Similar generational patterns can also be observed in Germany as regards the quality of vocational training (Lempert 1990), the training opportunities of women (Blossfeld 1989), foreigners (Benner 1982), and children from lower social classes (Blossfeld 1990b).

Based on these findings, one must conclude that the German dual system should be changed in such a way that also older employees have a fair chance to obtain vocational training certificates later on in their working life (Mayer and Blossfeld 1990).

Table 1: Vocational Qualification and Entry into Labour Market Segments (First Job) in West Germany

Highest vocational qualification	Labour market segment of the first job				%
	Secondary labour market in small firms (SS)	Secondary labour market in large firms (SL)	Craft-specific labour market (CS)	Firm-specific labour market (FS)	
No vocational qualification	62.4	18.7	9.8	9.1	100.0
Vocational training, Master Craftsman, or technical qualification	17.3	8.2	47.4	27.1	100.0
Professional College Degree, University Degree	0.9	1.8	55.5	41.8	100.0

Source: Blossfeld and Mayer (1988)

The importance of this argument may be underlined by the fact that the German dual system plays a significant role for labour market segmentation in the Federal Republic of Germany (Blossfeld and Mayer 1988). Table 1 shows that the majority of workers having no vocational qualification (81.8 %) are employed in the secondary labour market in large and small firms. Only 9.8 % succeed in entering the craft-specific labour market segment and 9.1 % in entering the firm-specific labour market segment. Of those just beginning work who have a vocational training certificate, 74.5 % are found in the craft-specific and firm-specific labour markets, but 25.5 % are employed in the secondary labour market despite their vocational training. This pattern concurs with Hofbauer's (1983) finding that a significant fraction of workers with vocational qualifications are subsequently employed in unskilled jobs. The most highly qualified employees are almost exclusively employed in the craft-specific (55.5 %) or the firm-specific (41.8 %) labour markets after finishing their education. Table 1 thus underscores the importance of qualifications acquired in the vocational training system for entry opportunities into the West German labour market and shows how the vocational training system itself serves to segment the labour market (Blossfeld and Mayer 1988).

Table 2: Transitions between labour market segments (all jobs over the career) in West Germany

Labour market segment for the <i>n</i> th job	No (n+1)th job (censored episode)	Labour market segment for the (n+1)th job				N	%
		SS	SL	CS	FS		
Secondary labour market in small firms (SS)	38.1	39.1	11.4	7.5	3.9	1,404	100.0
Secondary labour market in large firms (SL)	45.9	11.8	26.4	5.5	10.4	769	100.0
Craft-specific labour market (CS)	40.7	5.0	4.3	38.4	11.6	1,728	100.0
Firm-specific labour market (FS)	44.8	3.2	2.7	10.9	38.4	1,408	100.0

Source: Blossfeld and Mayer (1988)

Workers without vocational training certificates, however, are not only disadvantaged at the beginning of their job career by having a high probability of entering the secondary labour market, but those without are disadvantaged their whole working lives. They have only a small chance of upward mobility and do not gain access to skilled positions later on in life. As table 2 shows, employees do move between positions within the secondary labour market, but seldom between the secondary and the primary segments. Of those previously employed in the secondary labour market in small firms, 88.6 % remain (38.1 % plus 39.1 % plus 11.4 %); of those employed in the secondary labour market in large firms, 84.1 % remain (40.7 plus 38.4 % plus 11.8 %). In the Federal Republic of Germany the size of firms and related internal and external recruiting practices are less important for labour market barriers than they are, for example, in the U.K. or the United States. Instead, labour market segments are much more the result of vocational qualification barriers, mainly between the primary and secondary sectors.

Conclusion

In summary, one can say that in a cross-national comparison the German dual system has considerable strengths in dealing with the problems of modern labour markets, although there is, nevertheless, still room for improvement. In particular, the German dual system must improve the coordination of theoretical school-based learning with practical workplace training; it must reduce the number of different training occupations and their mutually exclusive character; it must be changed in such a way that older employees also have a fair chance to acquire vocational training certificates later on in their working life, and it must be reintegrated again into the changed environment of the general school system.

Since systems of vocational training are an integral part of the more general nation-specific organizations of the educational system and the nation-specific employment systems, it is difficult or even impossible to transpose systems of vocational training (or part of them) from one country to the next. Thus, one must be careful, for example, to implement the German model of vocational training in other Western European countries. It is very likely that this will not work because these countries have developed quite different labour market institutions and job mobility regimes.

As far as the German dual system is concerned, it seems that it also must be supplemented by a more effective system of further education and retraining, which accompanies the worker throughout his occupational career. On the basis of what has been discussed in this paper, such a system should include the following elements: (1) a practical in-firm training and theoretical school-based instruction; (2) the inclusion of the various interests of the state, employees, and employers in setting up and organizing training; and (3) the introduction and institutionalization of retraining in the form of an upward career. In short, there is a clear need in Germany to develop a system of further training parallel to the institutions of the dual system.

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Notes

¹ The "dual system" is the prevailing type of vocational training in Germany. "This training takes place in both privately owned and state-owned-and-operated enterprises and is complemented by instruction given in part-time vocational schools financed and run by the state." (cf., Max Planck Institute for Human Development and Education, 1979:).

Tracks and pathways: differentiation in education and training systems and their relation to the labour market

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Summary

This paper outlines a theoretical framework which explains patterns of participation in education and training systems in terms of the pathways which lead through them and into the labour market. The paper uses this framework - the 'pathways perspective' - to construct a typology of post-compulsory education and training systems and to propose hypotheses to explain current trends. It argues that two main types of systems, 'pure tracking' and 'flexible tracking' systems, are both inherently unstable. The pathways perspective offers an approach to the comparative analysis of longitudinal data, of the kind which this Network seeks to promote.

Reversing the causal arrow

Conventionally, in longitudinal analysis, explanation is at the individual level, and causality follows chronology. For example, an individual's family background is used to explain his or her educational attainment; attainment in early stages of education is used to explain participation and attainment in later stages; and educational attainment is used to explain success in the labour market. This conventional approach has been frequently criticised over the years. In its manifestation as the American 'status attainment' research, and especially Jencks' (1972) influenced work on *Inequality*, it has been criticised for ignoring 'structural' determinants of attainment and of inequality in education and the labour market.

Another limitation of the conventional approach to longitudinal analysis is that it ignores the ways in which causal relationships run in the opposite direction. In the conventional approach, participation and attainment in education influence labour-market success; but in reality the structure and organization of the labour market, with the opportunities it provides and the way it rewards educational success, may in turn influence participation and attainment in education. For example the relatively low level of educational participation in the UK, and in particular the weakness of its vocational education, is partly attributable to the selection and recruitment practices of the UK labour market, which fails to reward educational attainment in general and vocational qualifications in particular (Raffe 1992). Similarly, within the education system, conventional longitudinal analysis may treat attainment at one stage of education (eg secondary school) as an influence on participation and attainment at the next (eg university); but in doing so it ignores the 'backwash effects', familiar to educationists, whereby the criteria for selection and success at one stage of education influence the choices and attainments of students in previous stages.

The notion that the 'causal arrow' in longitudinal analysis may sometimes be reversed is not new. Some sociologists (notably Roberts 1968, 1981) have criticised individualistic (developmental) theories of labour-market entry, arguing that opportunity structures rather than individual self-concepts and choices were the principal determinants of the occupational allocation process. Other social scientists have viewed students and young people as (more or less) rational actors, whose decisions take account of future rewards and penalties. For

example, studies of young people's educational decision-making have contrasted 'push' and 'pull' factors (Gordon 1981, Gambetta 1987); economists have used labour-market variables such as rates of return or unemployment rates to predict educational participation (Whitfield and Wilson 1991, Bennett et al, 1992); and Paterson (1992) has demonstrated how applications to higher education respond to the prevailing opportunities. At a more institutional or systemic level Meyer (1980) has used a model of rational, forward-looking students to reintroduce institutional concepts to school-effectiveness research; and I have used a similar model to analyse the effects of the labour-market 'context' on the structure of education and training systems and the success of educational innovations (Raffe 1984, 1990).

The simple premise of this paper is that young people's educational participation decisions respond to the opportunities, incentives, costs and constraints that are associated with the available options. These options can be seen as different 'pathways' through the education system and into the labour market. In the next section of the paper I formalise and elaborate this 'pathways perspective'. I describe three sets of 'independent variables': young people's preferences and aspirations; aspects of education systems; and aspects of labour markets. The main 'dependent variable' is participation; the pathways perspective seeks to explain the level, trend and distribution of participation in education as a whole, and in different types of education (such as general, technical and vocational). In this paper, I concentrate on the first post-compulsory stages of education, and on vocational education in particular. The pathways perspective is currently providing the framework for a cross-national study within the OECD's activity on vocational and technical education and training (VOTEC).

The pathways perspective

The pathways perspective sees education as a system of differentiated and interconnected pathways, along which routes can be followed leading either to further educational pathways or to various destinations in the labour market. Education systems vary in the ways that pathways are structured. In some systems pathways diverge, with few interconnecting routes; in other systems there may be frequent crossroads and junctions, with pathways linking back to join others already encountered. Each pathway is associated with various opportunities, incentives, costs and constraints. For example, educational options vary in respect of their ease of entry, the probability of success in the course, the opportunities for transfer to other courses, the chances of progression to higher levels of education, and the labour-market returns in terms of employment chances, earnings, and so on. Moreover, the opportunities, incentives, costs and constraints associated with any one pathway may vary for different types of students. Young people's educational choices, and consequently participation patterns, respond to the ways in which pathways are structured in a system and to the opportunities, incentives, costs and constraints associated with each option. (These choices include, of course, decisions not to participate or to drop out.) The pathways perspective therefore assumes a degree of instrumentalism on the part of young people. Students and trainees are interested in where their pathways lead; they are not there just because they enjoy the ride. The pathways perspective also makes a more pragmatic assumption about the 'rationality' of young people's educational decisions. It recognises that young people have incomplete information, that their decision-making does not always follow a model of procedural rationality, and that they are influenced by social and cultural pressures. It does, however, assume that the *aggregate outcomes* of young people's decisions can be explained - in part - on the assumption of rationality. There are several explanations for this apparent paradox, but they lie beyond the scope of this paper.

The main dependent variable of the pathways perspective, as mentioned above, is participation. The first set of independent variables describes young people's values, aspirations and preferences (together with their information, perceptions and rationality). They include the level of aspirations, and the extent to which young people focus their aspirations on a specific occupational field, rather than seek to keep their options open for as long as possible.

A second set of independent variables refers to the way that pathways are structured within education and training systems. These variables include: the age or stage at which formal differentiation begins; the number of distinct tracks or pathways (for example are there distinct technical and vocational tracks?); the size of each pathway; the relation among pathways (are they formally or informally recognised? are general and vocational pathways clearly separate? are different vocational pathways hierarchically ordered?); the ease of transfer between tracks and pathways; and the extent and timing of specialisation within vocational education (how broad are the occupational areas of study? how easily can a vocational student switch

specialisms?). Some of these variables are illustrated later in this paper. Of particular interest to the OECD's VOTEC study are the attempts in several countries to construct new vocational pathways, and the trend in many education systems for pathways to become more flexible, with more opportunities for students to change direction.

The third main set of independent variables refers to the labour market and the 'market signals' which provide incentives or disincentives to participate in various forms of education and training. Relevant variables include: the occupational and industrial structure of opportunities; recruitment practices and selection criteria (with particular reference to qualifications); the nature and extent of labour-market segmentation; labour-market constraints on the supply of training (for example the availability of work experience placements for alternance training); and the relation between education or training and internal labour markets (in apprenticeship systems pathways often lead not to the external labour market, but to the internal labour markets of the employers who provide the training).¹

A fourth set of variables interacts with those described above. Preferences and aspirations, and also the opportunities incentives costs and constraints associated with different pathways, may vary according to the gender, social class, ethnicity and prior educational attainment of young people. The study of such group differences provides valuable 'degrees of freedom' for the pathways perspective. For example, labour-market changes typically affect males and females differently. One can therefore gain additional purchase on labour-market effects on educational participation decisions by comparing participation among males and females. The pathways perspective is consistent with the position of writers such as Gaskell (1992), who argues that gender differences are less a product of differential socialisation than of young people's more-or-less rational responses to the gender-differentiated opportunities that confront them.

The pathways perspective is potentially an analytical tool for policy-makers. It is implicit in several current policies, for example in attempts to raise the status of technical education by providing pathways to higher education, or to make vocational education more attractive by providing broadly based courses which offer wider and more flexible options for students. However, of the three sets of independent variables described above (young people's aspirations, education systems and labour markets), policy-makers are most likely to be able to influence the structure of education systems. In the rest of this paper I reflect this policy interest and discuss how participation in vocational/technical education may be influenced by the way in which pathways are structured. I first present a typology of education/training systems based on the pathways through them; I then use the typology as the basis for a number of hypotheses about current trends and problems. My analysis is speculative; it is expressed in terms of 'hypotheses' to emphasise the need for empirical testing.

A typology of education systems

The typology is summarised in Figure 1.² It is based on the relationships between tracks, and especially between general (or academic) and vocational (or technical) tracks. For simplicity, it assumes two tracks (general and vocational), and it ignores variation in the age at which tracking begins. Figure 1 shows pathways through the different stages of each track (respectively denoted G1, G2 and G3, and V1, V2 and V3) and between tracks. It identifies four types of systems:

Pure Tracking. In a pure tracking system the vocational track offers a strong progression route, running parallel to the general track, but there are limited opportunities for transfer between tracks. A student in the general track who wishes to join the vocational track must go back and enter it at the beginning, and vice versa. Germany may be nearest to a pure tracking system.

Flexible Tracking. In a flexible tracking system both tracks offer progression routes, but credit transfer arrangements allow students to move 'horizontally' between tracks. Some systems encourage more movement from general to vocational tracks, and others encourage more movement from vocational to general. The usual direction appears to be from general to vocational (CEDEFOP 1990).

General Track. The main feature of what I call a 'general track' system is that there is no strong vocational progression route. Only general education can properly be called a 'track' in this sense. Students continue up the general track for as long as possible, and only pass through vocational education briefly en route for the labour market. The reforms being introduced in

Spain during the 1990s appear to be of this type, since they provide no direct progression route between vocational modules at different levels (Gonzalez Tirados and Ortega Garcia 1992). Other countries, including the Netherlands, are moving in this direction (Dronkers 1992).

Unified. In a unified system there is no explicit tracking. Differentiation is based on individuals rather than groups; all individuals select units or modules from a common pool, although the modules vary in content and difficulty. In practice there might be a degree of grouping, either of individuals or of modules; to the extent that this happens a unified system might resemble either a flexible tracking or a general-track system. New Zealand is introducing a unified system (NZQA 1991); Sweden, some states of Australia, and possibly Scotland, may be moving in this direction (Vickers forthcoming, Raffe 1993).

Current trends in education and training systems

My discussion of current trends is expressed in terms of hypotheses, to reflect their speculative nature and the need for empirical testing. First, much of the argument may be summarised in two general hypotheses:

Hypothesis 1 There is a general trend from left to right in terms of the four types in Figure 1, except that the general-track and unified systems may represent alternative end-points of this trend.

Hypothesis 2 Both pure tracking and flexible tracking systems are inherently unstable.

These hypotheses are elaborated in the other hypotheses below. To explain the sources of these trends, it is first necessary to understand the fragility of pure tracking systems and the pressures on governments to develop more flexible systems.

Hypothesis 3 It is becoming increasingly difficult to sustain high participation in the vocational track of a pure tracking system.

The reasons for this may be expressed by a number of 'sub-hypotheses', referring mainly to the first set of independent variables (young people's aspirations etc) described above. These include:

Hypothesis 3a Young people's occupational (and therefore educational) aspirations are rising.

Hypothesis 3b Young people increasingly wish to defer occupational and educational choices or to make choices which keep their future options open.

As a result, more young people choose general rather than vocational options. This flight from vocational education is reinforced by a vicious circle:

Hypothesis 3c When participation in the general track exceeds a certain threshold (40%? 60%?) a vicious circle sets in which affects the expectations of young people, employers and other selectors; this results in a progressive decline in the status of the vocational track, and in participation within it.

These trends have not affected all countries to the same extent. Young people's aspirations and preferences vary across countries (although there appear to be common trends: see OECD 1983 and Adamski and Grootings 1989). Moreover, some countries' vocational tracks have proved more resilient than others. The apprenticeship systems of the German-speaking countries have enabled these countries to resist the pressures on the vocational track much more effectively than most other countries (Blossfeld 1990, Rose and Wignanek 1990). The reasons for this may have less to do with the content or quality of training, or its proximity to the workplace, than with the different nature of pathways. In an apprenticeship or employer-sponsored training system pathways typically lead into the internal labour markets of the sponsoring employers, rather than into the external labour market, and young people appear to be more confident about the link between training and subsequent employment opportunities:

Hypothesis 4 The demand for places in vocational tracks tends to be higher where the pathways lead into the internal labour markets of the sponsoring employers, than where they lead to the external labour market.

The British Youth Training Scheme provides an example of this (Raffe 1990). Countries with systems as different as those of the Netherlands, Portugal and the United States are trying to create, or to expand, youth apprenticeships. This is not easily done in systems where there is no apprenticeship tradition. Governments alone cannot easily provide more pathways leading into internal labour markets; this requires the cooperation of employers (Schober-Brinkmann and Wadensjö 1991). And even in countries with well established and successful apprenticeship traditions, such as Germany, some commentators have suggested that the critical threshold (see hypothesis 3c) has now been passed, and that the vocational track is under threat (Adler et al, 1993). Most countries have responded to the pressures summarised in hypothesis 3 by moving towards a more flexible form of tracking (from the first to the second type in Figure 1). The analysis which underlies this response can be summarised as follows:

Hypothesis 5 Participation in vocational (or technical) tracks can be maintained or enhanced by increasing the number and variety of pathways which lead through these tracks.

Specifically:

Hypothesis 5a Participation in vocational tracks is higher, the greater the opportunities for transfer to the general track (including transfer to higher education).

Hypothesis 5b Participation in vocational tracks is higher, the wider the range of occupations to which any vocational course may lead.

Here our main interest is in hypothesis 5a. This hypothesis - however implicitly - is at the core of many current policy developments in vocational education. It is critical for the study of pathways and its rigorous testing is both a theoretical and a practical necessity. One approach to this might be to postulate a countervailing hypothesis:

Hypothesis 6 As the distance between tracks in a flexible tracking system diminishes, it becomes harder to maintain the separate identity and status of the vocational track.

This in turn may result in *lower* participation in the vocational track. Hypothesis 6 may be elaborated in the form of several sub-hypotheses:

Hypothesis 6a To the extent that students may easily move from the vocational to the general track, the values of the general (academic) track dominate the vocational track, since the ablest vocational students hope to transfer.

Hypothesis 6b To the extent that students may easily move from the general to the vocational track, the vocational track becomes seen as a consequence of failure in the general track; it therefore loses status.

Hypothesis 6c Where there are frequent opportunities for transfer, it may be difficult to sustain a strong vocational progression route.

Hypothesis 6d As tracking systems become more flexible, the differences between tracks become defined more exclusively in 'hierarchical' terms (differences of 'level' or difficulty). 'Horizontal' differences (of ethos, value-systems, goals, approach etc) become less significant.

This last point is similar to Tanguy's (1991) critique of the 'hierarchisation' of education and training in France, although all four of these sub-hypotheses are closely related and have been raised in the 'level V' debate in France. Similar issues have been raised in other countries (Squires 1989) and in recent debates on upper-secondary education in Scotland (Raffe 1993).

For simplicity, the typology in Figure 1 assumed two (or fewer) tracks. Tripartite or multi-track systems may also be described as pure or flexible, depending on the pathways between tracks; pure and flexible tripartite systems are illustrated in systems (a) and (b) in Figure 2. However, multi-track systems - particularly those which, as in Figure 2, split vocational education into 'technical' and 'vocational' tracks - may have an advantage over two-track systems:

Hypothesis 7 The more differentiated is vocational education, the greater its potential to attract students.

Italy, France and (hitherto) Sweden are examples. Multi-track systems offer a wider range of possible permutations, illustrated by systems (c) and (d) in Figure 2. In (c), transfer between

technical and vocational tracks is easier than transfer between general and technical tracks; in (d) the reverse applies.

I will now summarise the argument so far. A number of factors, including young people's changing aspirations, are making it difficult to sustain high participation in the vocational track of a pure tracking system. Most countries are responding by introducing more flexible forms of tracking, but in doing so they may threaten the integrity and status of the vocational track(s). Countries with apprenticeship systems, or with separate technical and vocational tracks, may avoid some of these problems, but by no means completely. It is becoming increasingly difficult to sustain a vocational track with high status and a strong progression route.

The general-track model responds to this problem by abandoning the attempt to create a progression route within vocational education. It treats vocational education, not as a track, but as a stage; most students pass through vocational education, but only after they have achieved the highest desired or possible level of general education, and before entering the labour market. A flexible tracking system is likely to develop into a general track system in response to the pressures described above. To the extent that the general-track system reflects a conscious strategy, it assumes that students are motivated to progress within general education. A contrary hypothesis suggests:

Hypothesis 8 A significant minority of young people is only likely to progress through postcompulsory education if there is a well-constructed, and well-signposted, vocational progression route for them to follow.

In other words, the general-track model may fail to attract young people who are not motivated by general education; at best, they will follow the shortest route through it (through V1 in Figure 1).

Finally, a unified system has no tracks but allows students to select varying combinations of general and vocational units from a single pool, subject to core requirements and combination rules. It can be seen as an attempted solution to the various problems of the other types described above. There are various arguments for a unified system (Finegold et al, 1990, Young 1993). It encourages participation by maximising the flexibility of pathways, by allowing young people to keep their options open (see hypothesis 5), and by offering to all who participate the incentive of mainstream certification:

Hypothesis 9 Participation is higher in systems where all or most students have access to the same 'mainstream' certification.

However, against this it could be argued that:

Hypothesis 10 When formal differentiation is abolished, informal differentiation will become more important. To the extent that this informal differentiation is based on curricular differences, general or academic curricula have higher status.

Hypothesis 11 The curriculum and ethos of any branch of education is dominated by the highest-status destination of its students. In a unified system, where all pathways potentially lead to higher education, 'academic' values and curricula dominate.

In other words unified systems may be subject to academic drift. This could result in higher total participation but with a smaller proportion of students taking technical and vocational options.

Conclusion

In this paper I have proposed a theoretical perspective which attempts to marry 'micro' and 'macro' levels of analysis and to expand the notions of causality implicit in much longitudinal analysis. The perspective therefore offers an approach to the comparative analysis of longitudinal data, of the kind which this Network seeks to promote. The illustrations in the paper have focused on the structuring of pathways within education systems, but one could develop similar hypotheses in relation to the pathways leading from education to the labour market.

Working within this framework, the paper has presented a typology of post-compulsory education and training systems. It has illustrated the current pressures on 'pure tracking' systems but has also identified the potential instability of the 'flexible tracking' systems which have developed in their place. It has proposed several hypotheses on the role and dynamics of pathways through educational systems.

The important point is that these are still hypotheses. The next step is to support theoretical development with empirical testing.

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Notes

¹ An earlier formulation included the 'production system' (or labour process) as a fourth set of independent variables. While this permitted analysis of the variable extent to which the labour market signalled the needs of the production system to young people, it complicated the model and stretched the metaphor of 'pathways'.

² The methodological value of typologies of education and training, particularly those which focus on technical/vocational education, requires further discussion. The principal value of the typology proposed here is heuristic: it can be used to analyse the direction and nature of change more easily than to classify existing systems. An alternative approach (eg Blossfeld 1990, Allmendinger 1989) compares systems in terms of dimensions of variation. In the pathways perspective relevant dimensions include the age at which pathways or tracks diverge, the number of pathways, the opportunities for (horizontal) transfer between pathways, the extent to which different pathways allow young people to keep their future options open, and so on. Most of the hypotheses presented below are, or could be, expressed in terms of dimensions.

Figure 1: Types of education/training systems

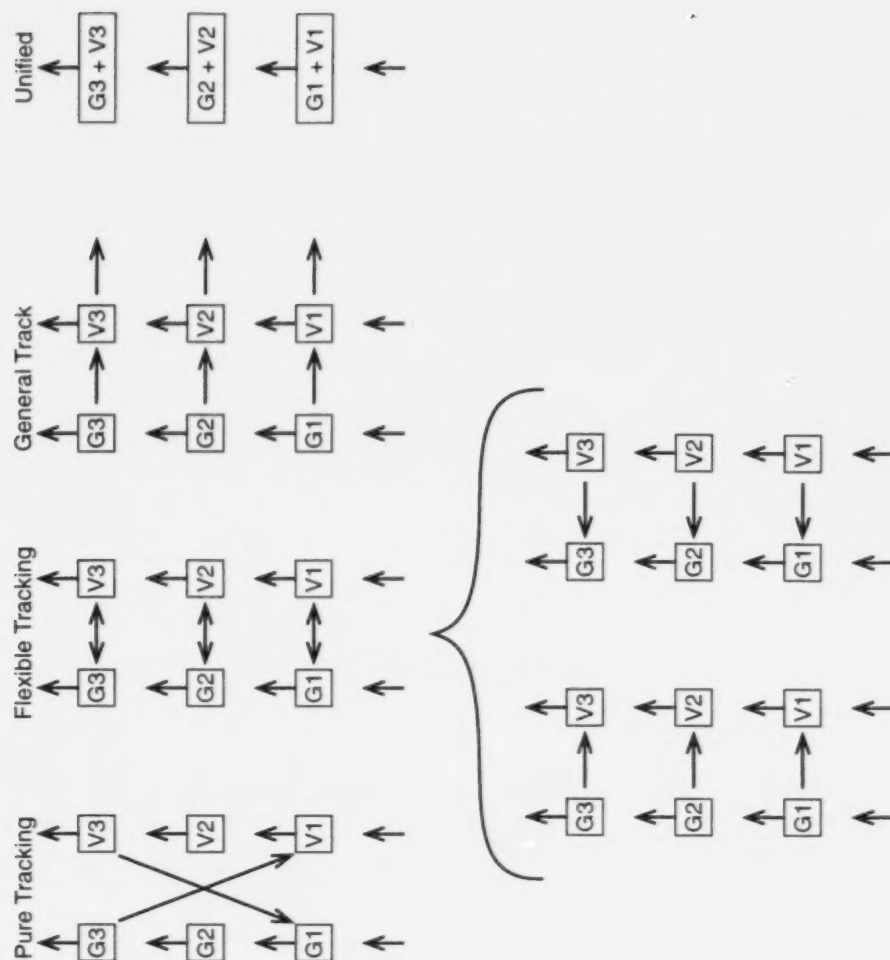
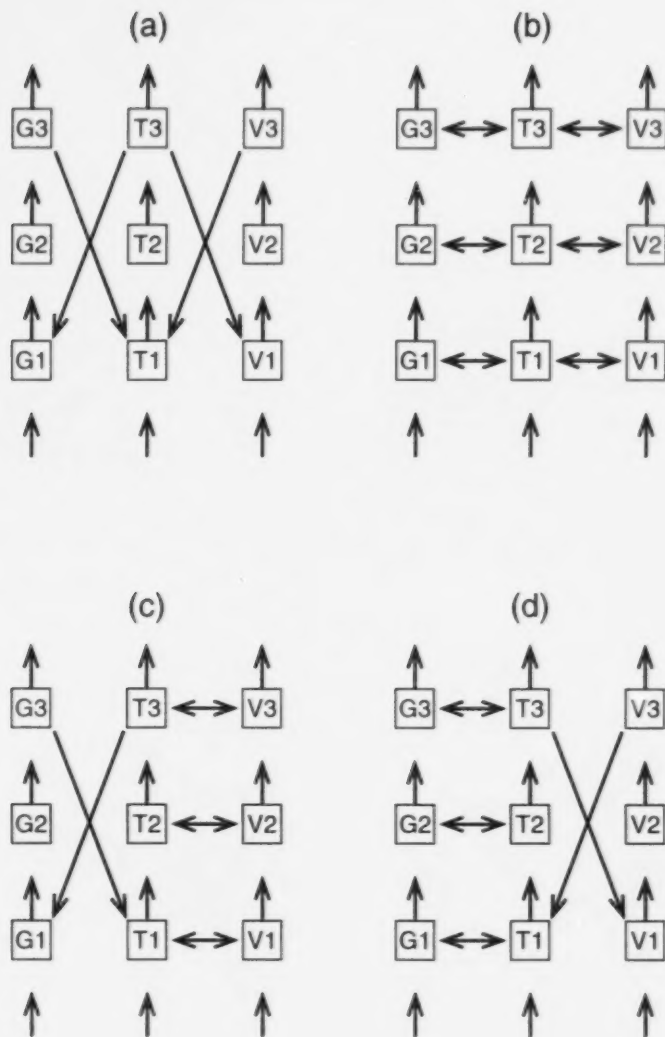


Figure 2 Tripartite systems



On the interest of longitudinal approaches in the analysis of vocational transitions

Introduction

In the course of the 1980s, the tools used in the approach to insertion substantially diversified. Quantitative studies were supplemented by richer qualitative observations, synthetic indicators likely to give a better expression of the multidimensionality of the studied phenomenon were given preference over simple rate calculations, instantaneous approaches were enriched by diachronic analysis designed to plot the complexity of the insertion process.

As shown by the evaluation of the work on insertion published in *"L'introuvable relation formation-emploi"*, this has been a gradual development: *"for over 20 years, economists and sociologists have multiplied time-related observations in various fields, but above all in the area of insertion and mobility"* (p. 67). Diachronic quantitative methods have thus been established, on the basis of which vocational routes have been finetuned and the achievements of transversal studies supplemented and even corrected. In spite of difficulties at the level of implementation (what period should be studied? what variables should be chosen? how should sequential data be analysed?), the results have been fairly conclusive. It has therefore been possible to *"warn against setting up a hierarchy of training programmes on the basis of the unemployment rates observed nine months following exit, because this hierarchization is overturned by subsequent occupational events"* (p. 69). And this has *"obliged researchers to try to give an answer to a dual question: what constitutes insertion? from what point onwards is one inserted?"* (p. 70). In parallel to this, "life story"-type qualitative approaches have multiplied. Such studies have rendered possible *"a dynamic vision of social relations, taking account of the strategies and reactions of the players to institutions"* and permitted *"better differentiation and correlation of social constraints and margins of liberty"* (p. 72).

This trend was confirmed at the colloquium *"Training and the labour market: the utilization of data for decision-making"*, organized by the EEC, CEDEFOP and GREE at Nancy in 1991. At this colloquium a number of authors expressed their clear preference for longitudinal surveys: this option is in fact *"in conformity with the hypothesis that insertion is a process over the course of time giving individuals complex and highly diversified routes"* which permits *"the analysis of routes and flows"* better than other methods. The debate led to the elaboration of a list of methodological questions to be resolved: definition of the period (from what point can insertion be considered to be completed?), the field (can young people and the unemployed be studied in the same way?), variables and indicators (how can one correctly plot work situations and life conditions?), the combination of tools (how can the major trends stemming from global quantitative surveys and finer data obtained from restricted samples be correlated?), utilization of results (how can one take advantage of all the wealth of longitudinal surveys without recourse to ultra-sophisticated statistical procedures?).

Despite the difficulties, the U-turn has therefore been taken. It is largely agreed that diachronic approaches are more effective, even if decision-makers continue to use simple indicators which are excessively reductive. The trend is so clear that it not only applies to the case of young people in the course of insertion but also to other more or less difficult transitional groups, e.g. the unemployed, and in particular the long-term unemployed.

At this meeting of the European network on "young people's transition from education to the labour market", we felt it would be useful to review the utilization of these longitudinal analyses to see under what conditions they can be implemented and what can be expected from them. Following a recap of the general theoretical arguments underlying such an approach (1), we shall go on to examine the contributions of the main studies of this type conducted in France

in recent years (with the exception of the "life story"-types which pose specific problems), both from the point of view of their foundations (II) and the results obtained (III).

1. General arguments in favour of the longitudinal approach

Concrete questions which may be clarified

The employment system has undergone a process of profound change in recent years. Among the major phenomena affecting the labour market, it seems that three can be clarified by longitudinal approaches.

The first is precariousness. The major trends are now very familiar: diversification of forms of employment, the accentuation of instability in the light of the dual effect of the development of contracts of a specific duration and new forms of employment created by public authorities, the over-representation of young people in precarious activities.... According to B. Fourcade, the 1970s were the time of the *"recomposition of particular job situations"*. This phenomenon is certainly not new: the situation of itinerant workers in the 19th century or of home workers was no less unstable than that of young people today and the labour market has always opposed segments ensuring more or less stability. Certainly the flows concerned are hardly more considerable than in the 1960s (unless unemployment and precariousness are included), but the forms have changed profoundly, triggering a quasi-definitive exclusion of a substantial fringe of society. This precariousness is in itself highly diversified. Depending on the cases in question, it may be linked to *"the legal form of the working contract, (...) a threat or an uncertainty, (...) the occurrence of events whose date is unforeseeable, (...) uncertainty concerning the duration of employment resulting from the fragility of the establishment"* (p. 9); it may be a *"precariousness in terms of situation"* (*"if there is a high probability of being forced to change the situation"*) or a *"realized precariousness"*. Finally, it may be more or less chronic and be accompanied by highly diversified, more or less wage-based, resources.

It can therefore be understood that the author will turn to the realization of diachronic studies: *"the logic of discontinuity means that particular situations must be placed in a longitudinal perspective: for an individual placed in such situations, the essential is the chain of situations"* (p. 12). Even if it *"is still difficult to follow routes"*, it can be seen that *"particular situations often function in clusters"*, it can be observed that *"the diversity of particular job situations has to a considerable extent become renewed"* with a high degree of *"instability of forms"* and a *"renewal of uses and users"*, with *"a reversal of the causes of this mobility and the emergence of transitions through longer periods of unemployment affecting a greater number of persons"* (p. 16).

All these observations and hypotheses can only be confirmed and fortified with the help of longitudinal surveys. Thus, to restrict ourselves to the case of young people, one could, following C. Nicole-Drancourt, examine whether precariousness is a *"model or mode of insertion"* (p. 64), if it systematically affects only some young people or whether it is *"a random cyclical phenomenon virtually generalizable to young people as a whole"*. Again thanks to diachronic approaches, one could examine whether insertion follows the queue model *"à l'anglaise"*, by gradual progression in thresholds and successive steps, or *"à la française"*, with the more determined bypassing the others and stagnation of the most discriminated. Finally, it would be possible to see whether juvenile precariousness constitutes, to quote the terms of a report of the Commissariat Général du Plan, an *"ascending spiral"* or a *"potential risk of long-term unemployment"*.

A second problem which can be clarified by these approaches is unemployment. The extent and forms of this phenomenon in France are familiar: rising unemployment despite the measures taken, the swelling of the ranks of the long-term unemployed and the establishment of a significant core of the chronically unemployed and excluded, the high degree of selectivity of unemployment and the massive reflection of young people under the combined effect of company policies and the economic and cultural context... In this respect longitudinal studies offer a precious contribution. In particular, such studies mean that persistent factors of unemployment heterogeneity can be identified and the more or less chronic character of long-term unemployment and its proximity to exclusion measured (J. Freyssinet refers to *"the increasing overlap between recurrent unemployment and long-term unemployment"*, 1992, p. 6). Similarly, one could examine the effects of policies and, e.g., see how, to quote A. Boulayoune and H. Jory on the subject of a study on individual training actions, *"the struggle against exclusion is not necessarily resolved by insertion"* (p. 101), how *"it is the very face of*

occupational transition which is being transformed under the growing influence of new practices and processes of labour integration".

The third problem which can be studied in this perspective is the dynamism of the labour market as a whole. Recently the system of mobility has been transformed, the fluidity of the labour market has been reduced, rendering it even more difficult to get out of unemployment, and workforce movements and individuals' behaviour have changed. The fine understanding of these processes, permanently displacing situations and statuses, can only be clarified on the basis of diachronic analyses identifying all the changes in states and perhaps the rigid partitions differentiating population groups in terms of their perspectives of mobility. One could therefore - and this is a hypothesis - see how the workforce reserve is established and functions in the context of the generalization of wage-earners and the depletion of the transitional forms of workforce mobilization.

The question of occupational transition and its consequences

When, in the early 1980s, we began to work on the question of occupational transition, it was largely as a reaction to studies on occupational insertion which at that time were characterized by a reductive concept of workforce deployment which privileged individual behaviour to the detriment of social processes of workforce deployment. From this point of view, it seemed that employment movements could not be exclusively understood on the basis of the concept of the labour market, nor independently of the modalities of workforce utilization. With reference to studies on segmentation, it therefore seemed operational to approach the question of insertion in terms of the predominance of the demand for labour and the functionality of the process of categorization; moreover it seemed necessary to analyse all the strategies of the players (young people, companies, training establishments, public authorities), it being assumed that the social forms of organization of the transition to the labour market were determinant.

This is why we felt it appropriate to propose a new approach, occupational transition thereby being defined as a long and complex process, characterized by a socially organized entanglement of functions and status, contributing to workforce categorization. In our opinion, this process corresponded to the emergence, in times of crisis, of new and diversified social forms of the labour integration of the inactive working population, this being understood from the triple angle of entry into the labour market, registration as a wage-earner and access to a specific working process in a given firm.

This question has allowed major theoretical questions in the field of labour socio-economics to be raised differently. It first of all called for a reinterpretation of the links between training and employment and skilling, no longer understood in terms of "adaptation" or "specificity" of young people, but as social processes managing this point of transition and combining training, assignment and deployment of the workforce: in this perspective, transition appears as a point of the reconstruction of skills marked by a redefinition of the contents of employment and training and by a displacement of the roles of the players (with, e.g., an increasing weight of firms via their alternance programmes). It then permitted reconsideration of present mobility management modalities, the focus being on the organization of occupational transition leading to the re-establishment of the role of the external market and stressing the fact that it is also organized in its own way. This mobility management appeared highly diversified, the characterization of the population revealing a selection process playing, according to the new forms adapted to a context of the generalization of wage-earners, the traditional role of the management of a reserve army: response to the fluctuations of activity, selection of the population, downward pressure on salaries... It finally permitted a different interpretation of recomposition in the course of wage relations. From this point of view the growth in unemployment and job precariousness go hand in hand with increased social regulation, the search for the social equalization of workforce management costs, the tightening of links between workforce reproduction and utilization and the growing role of the firms.

This issue of transition, by the priority it accords to the processes of the constitution of routes and workforce categorizations, logically prioritizes longitudinal approaches in the field of concrete analysis. And this is what various authors have since done. For example, when C. Nicole-Drancourt highlights *"the dispersion and in-depth restructuring of old insertion models... into different routes dominated by the dimensions of uncertainty, flexibility and reversibility"* (p. 65), she can but confirm the limits of traditional insertion studies as being several months. Similarly, only longitudinal surveys could validate the hypothesis of D. Linhart and A. Malan, of *"two modes of transition: the first, in which occupational insertion takes place relatively late and leaves sufficient time for the development of one's own lifestyle, characterized by*

instability, uncertainty, the absence of responsibility, and in essence the absence of a genuine social status (...), and the second, in which insertion takes place more quickly, whereby young people launch into wage-earner status at an early stage and begin to construct their occupational life, the life to which they aspire (strategy of accomplishment), the life accepted (adaptation strategy) or the life imposed (the logic of necessity)" (p. 87). Finally, one could ask to what extent today certain population groups experience "ongoing", chronic forms of transition in the sense that they never reach a state of stability: only diachronic surveys allow the validation of such a hypothesis and therefore the reconsideration of certain aspects of our question which have perhaps become obsolete.

2. Specific arguments put forward by users

Longitudinal surveys conducted in France

The past few years have been favourable for the realization of diachronic surveys. Here, of course, we are above all referring to the surveys on occupational itineraries following various streams of initial training launched by CEREQ in the mid-1970s and partly utilized since that date. According to F. Pottier, these studies make it possible to "*reason in terms other than a match between training and employment*" (p. 262) and reveal insertion processes. We are also referring to certain national surveys among smaller population groups using the same principle of repeated observation of the same group:

- the national panel of 3,000 long-term unemployed persons surveyed by telephone by ANPE and the statistical department of the Ministry of Employment four times at sixth monthly intervals following the 13th month of registration (January 1990);
- the so-called INSEE "unemployed follow-up" survey, surveying a sample of 5,766 job-seekers on four repeated occasions in the period 1986-1988;
- the "young people" survey, in complement to the March 1992 employment survey, describing the paths of young people from the age of 16, periods of participation in courses, employment and unemployment, the essential stages, mobilities...

Finally, several local surveys reconstituting in detail, but this time a posteriori, the past of specific groups, e.g.

- the survey conducted by C. Nicole-Drancourt on a sample of 115 young people from the Chalonais area "*most of whom had experienced at least one employment break eight years before the survey*", combining the statistical approach with qualitative interviews;
- the survey by D. Demazieres in March 1990 in the Nord-Pas de Calais region on a sample of job-seekers registered with ANPE for at least three years;
- the survey by X. Joutard and P. Werquin among 2,300 job-seekers registered with the ANPE with the aim of reconstructing their occupational paths in the years 1985-1987;
- the study by O. Benoit-Guilbot on a small sample of unemployed persons registered with a local ANPE branch in the agglomeration of Elbeuf, surveyed twice at an interval of three years.

The arguments advanced

All these surveys focus on the paramount interest of time-related approaches; three arguments have been advanced in this respect.

First and foremost - and this is self-evident from the purely logical point of view - the paths of individuals can only be identified on the basis of a dynamic approach, a point which has been emphasized by various authors. According to D. Demaziere, diachronic observations constitute "*a decisive contribution compared to classical and statistical approaches of employability*", particularly making it possible "*to take account of time-related processes of return to employment*" (pp. 202-203). They permit identification of the dynamism of individual routes since insertion and raise the question as to whether there is "*a predictive character of the types of route assumed by individuals at the beginning of their working lives in terms of typical mobility logics*" (Pottier, p. 278). Thus, according to J.J. Paul, "*the concept of occupational*

route means that all the occupational events characterizing the itinerary of an individual can be considered and given a meaning, expressed vis-à-vis overall movements structuring the labour market" (p. 146), (...) "and occupational history can be reinserted into the overall employment system" (p. 149). J.P. Florens, D. Fougere and P. Werquin hold a similar view: "systematic statistical study of the longitudinal data of unemployment permits analysis of two important questions: the effects of the heterogeneity of the unemployed population and the dependency of the process of leaving unemployment on the time elapsed since the date of entry into unemployment, and, more generally, on the individual's past in terms of labour market participation" (p. 441).

The dynamic approach also renders possible the examination of significant segmentations of these processes. Thus O. Favereau, M. Sollogoub and J. Zighera maintain that "segmentation calls for a longitudinal type of analysis (...) it is the occupational routes of the wage-earners which will differentiate labour market segments" (pp. 104-105). Similarly, C. Guitton and H. Sibille note that "to evaluate the risk of long-term unemployment affecting individuals, one must use a time frame not merely limited to the observed period of unemployment" (p. 43)... "longitudinal surveys, studying the individual characteristics of the unemployed and their correlation, permit better identification of the factors weighing on the organization of the dole queue and the heterogeneous character of long-term unemployment, by calling for a reasoning based on the typologies of unemployed persons, rather than perceiving long-term unemployment as a unified category" (p. 45).

Finally, the longitudinal approach makes it possible to identify trends in individual strategies. According to B. Gazier, "longitudinal study of the routes of unemployed persons, whether they draw upon flow models or follow in detail the routes of the smallest groups, highlights the fact that the weight of collective or cyclical constraints in no way exclude the effect of individual strategies" (p. 582). For her part, C. Nicole-Drancourt (1992), in a critical approach to the concept of occupational transition, considers that "there are specificities to occupational itineraries (...), occupational mobility poses different challenges and logics according to who one is and the life phase one is going through" (p. 288); and that "the occupational mobility of young people expresses strategies which are very specific to youth" (p. 296), "the succession of jobs occupied being the product of multiple social logics, the whole having as a vector a major logic characterized by the individual and his/her socialization itinerary" (p. 65); "the occupational mobility of young people expresses strategies which are very specific to youth, integration strategies, but also strategies of adaptation to recent transformations in the employment systems and lifestyle" (p. 296).

3. The contributions of typologies

Results

The utilization of these surveys generally leads to the elaboration of typologies permitting a better description of the routes of the groups concerned and the differentiating factors. With this in mind, a number of authors have in recent years focused their attention on various population groups. F. Pottier, e.g., differentiates exclusion, stabilization, upgrading external mobility and external mobility with successive failures among young people.

As far as the unemployed are concerned, D. Rouault-Galdo defines five types of paths "on the basis of the positions occupied at the time of one of the four surveys" (p. 55): lasting insertion, lasting inactivity, prolonged unemployment, uncertain insertion and unsuccessful insertion. H. Huygues-Despointes, for his part, differentiates five itineraries of unemployed persons on the basis of a hierarchical classification of monthly employment situations occupied in the course of the ten years studied: stable compensated unemployment, reinsertion, permanent unemployment, unemployed persons withdrawing from the labour market, specific reinsertion paths. In their analysis of insertion contracts, J. L. Outin and R. Serrier note "an initial disparity between those who are not dependent on occupational insertion and those who must find access to a job (...), the latter being differentiated according to the direct or indirect character of access to employment (and) the nature of employment to be prospected" (p. 241). Finally, O. Benoit-Guilbot identifies various more or less "autonomous" and "mobilized" job search strategies and observes their more or less positive impact on occupational insertion (p. 497).

As far as the particular case of the long-term unemployed is concerned, D. Demazieres (1992), "by combining descriptive statistical data on itineraries" and "discursive data related to the experience of the routes", distinguishes "four types of routes experienced by the

long-term unemployed: "the broken route and fatalistic logic, the discontinued route and mobile logic, the relegation route and traumatized logic, the route of precariousness and network logic" (p. 224). Finally, D. Gelot and B. Michel (1992) identify three standard routes among the long-term unemployed: "those who are on the whole in the course of insertion, essentially men and young people; unemployed persons who are on the whole in the course of exclusion, including a high proportion of women aged 25-49; and finally discouraged persons who have withdrawn from the labour market, in particular women and older unemployed persons" (p. 79).

These typologies, once defined, may be related to interpretative discriminating variables, the weight and configuration of which are clarified by the various authors quoted. Thus J.P. Florens, D. Fougere and P. Werquin, in highlighting "variables having an effect on the instantaneous probability of recruitment" quote "cyclical variables, individual demographic and socio-economic characteristics" (p. 463). Three types of variable are generally put forward.

The first of these refers to experience of employment and joblessness. H. Huygues-Despointes e.g. stresses the essential role of two dimensions of job search behaviour in the definition of the itineraries of the unemployed: "availability" and "distance to employment", defined by "occupational experience and the ability to conduct a precise and targeted job search" (p. 67). N. Drancourt differentiates employment routes by combining information on the construction of the labour situation, the logic of occupational commitment, social registration strategies, the content of an occupational project, the configuration of entry into working life, insertion tools, the modalities of occupational routes and family commitment logics. She also maintains that "the profiles of evolution of the occupational routes of young people are very soon locked around the quality of the 'labour situation'.. (which) 'feeds occupational commitment strategies (...), strategies which in turn produce job situation production and reproduction logics'" (p. 65). X. Joutard and P. Werquin stress the "impact of the individual's occupational past (no vocational experience, having experienced numerous recurrences of unemployment, non-working activity prior to job search...)" (p. 154). Finally, F. Pottier draws up his typology on the basis of three sets of principal variables (overall length of unemployment, the status of each job, the number of employers) and complementary variables such as the reasons for mobility and changes of employment.

Personal variables are the second group taken into consideration. F. Pottier, e.g., stresses the educational and social origin of young people. D. Rouault-Galdo differentiates routes on the basis of traditional determinants: "age is the decisive factor, followed by family situation, certificate and term of registration; at the third level, nationality, socio-occupational category, benefits received, circumstances of entry into unemployment and place of residence come into play" (p. 53). As for X. Joutard and P. Werquin, they identify among "the factors which constitute penalties in finding regular employment (...) individual characteristics (being a woman, aged 50+, having no vocational qualifications)". Finally, other authors stress the impact of the state of the job market. H. Huygues-Despointes, e.g., maintains that "the trend which is the most significant is the difference between the employment of men and women" and "major trends on the job market are inscribed in the typology of itineraries" (pp. 430-431).

Questions of methodology

Naturally, the results of these various typologies have yet to be synthesized, to see to what extent they are compatible, to examine their implications and theoretical consequences. Since it is not possible to examine these questions in depth in the present context, we shall finally highlight some of the main methodological questions raised by these various approaches.

The most critical of these questions concern the conditions of data construction. The questions at this stage are familiar. Is it preferable to reconstruct the past of individuals a posteriori (at the risk of distorting the information) or to establish panels (despite their unwieldiness and the delays they require)? What can be gained from life stories? How can global statistics and more qualitative, in particular discursive data be combined? How can stock and flow data be cross-linked?

The most complicated problems concern analysis of results. We know, e.g., how difficult it is to exploit calendar data if we really want to take account of all the wealth of the collected data. Similarly we know how difficult it is to conduct the necessary international comparisons to identify national specificities. Therein lies a possible work programme for the years to come.

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Education and Training in Transition: Young People Finding their Way into Working Life in the Course of a Changing Social and Economic System

Main Results from the "Youth Labour Market Monitor", A Longitudinal Study on East German Youth

Introduction

In East and West Germany different patterns of transition from school into working life have developed during the past 40 years. The aim of the study reported here is to find out how these patterns changed after the reunification of the two German states. Since the New Länder (i.e. the 5 new federal states on the territory of the former GDR) almost completely adapted their educational and training system to that in West Germany it was expected that also the educational behaviour of East German youths such as school attendance rates, length of school attendance, choice of school type and career choice patterns would adjust to those in West Germany.

A longitudinal survey was started in May 1991 covering a representative sample of 2,000 16 to 19 year old youngsters in the five New Länder and East-Berlin - most of them still attending school or apprenticeship training. They were asked about their present employment status, educational attainment, plans for subsequent education or vocational training, application for apprenticeship training, job search strategies and placement problems, type of training establishment and other related information like size of firm, industrial sector etc. but also about their family background, personal attitudes towards education and work and about the consequences of the "Wende" for their personal situation.

Follow-up surveys were conducted in November 1991, May 1992 and November 1992. Two further follow-ups will be started in November 1993 and November 1994. The study deals with a "rolling" sample which means that each November a new age cohort of 15 year olds is included while those being 20 years and older are excluded. The last wave in November 1994 however will again include the total sample from the beginning on.

Because of the changing institutional background in the educational system no reliable data existed in the New Länder on the demand for apprenticeship places by school leavers. So one of the main interests of educational policy in the study was the need for training places for new entrants in the years after 1990. Secondly the survey should give information on the East-West-mobility of young people starting their career life in order to find training opportunities which were rare in East Germany.

Questions concerning these topics therefore were repeated in each questionnaire. Other topics, for instance family background, attitudes to various subjects, experiences during apprenticeship training, were changed from one wave to another. Table 1 gives an overview over the main variables included in the various questionnaires. Special difficulties in constructing the questionnaires arose because the changing institutional framework in the education and

training sector as well as in the economic system as a whole required both the former terms and institutions and the present new ones in order to be sure that within a postal survey questions were understood and correctly answered.

1. Transformation of a centrally planned economy to a market economy: Impact on the educational system and educational behaviour

After the reunification of the two Germanys one of the major tasks of educational policies was the unification of the different educational and training systems in the two states. Although both systems were traditionally based on the same roots (a three-part hierarchical school system and apprenticeship training as the most important form of vocational training) the integration into very different political and economic systems after World War II was responsible for a variety of different structures that have developed within the past 40 years.

In order to understand the rapid changes which occur in educational behaviour after 1990 some details on the institutional framework of the two educational systems are necessary:

After World War II the GDR-school-system changed to a more egalitarian and comprehensive system with a unique school type for all children up to 10th grade (POS = polytechnical secondary school). Access to higher education past 10th grade (EOS = extended upper secondary school leading to the "Abitur" in another 2 years) however was limited according to the estimated demand of the economy for highly qualified manpower. On the other hand West Germany stuck to the traditional three-part school system separating the children after 4 years of primary school into three different school types according to their performance and educational aspirations which roughly correspond to the different levels of vocational education that exist in the FRG:

- the "**Hauptschule**" (lower secondary school) leading to the lowest school leaving certificate at the end of class 9 or 10 allowing the entrance to apprenticeship training and some low level vocational schools,
- the "**Realschule**" (intermediate school) leading to a medium level school certificate with the opportunity to enter technical and vocational schools besides apprenticeship training,
- the "**Gymnasium**" going up to 13th grade with the "**Abitur**" as final examination allowing university entrance as well as any other form of vocational education or training.

In the West German educational system the choice of school type is a crucial point in the course of career decisions because it determines to a large degree later educational attainment and labour market chances. Since this decision has to be made very early (at the age of 10) it is usually taken by the parents so that in fact the three part school system in West Germany reproduces social stratification and inequality. Recent developments in West Germany, however, show that the majority of parents send their children to Gymnasium in order to give them a fair chance of obtaining the Abitur. One of the major questions connected with the Youth Labour Market Monitor was how young East Germans and their parents who have experienced a quite different school system which provided greater equality of educational opportunities would react to a less permeable educational system.

Apprenticeship training is the most important form of vocational education in both countries. Between 60% and 70% of the relevant age groups are trained in what is called the "dual system" in West Germany. The average duration in the GDR for 10th class graduates, however, was two instead of three years in West Germany. In addition to the regular apprenticeship training there was a three year apprenticeship course in the GDR which combined the vocational training with general schooling to obtain the Abitur - a highly attractive course for those who wanted to apply for a technical degree at the university. There is nothing comparable in the West German system and with reunification this type of course was abolished.

Besides apprenticeship training in both countries, there was a variety of technical and vocational schools and colleges on different levels qualifying for certain occupational fields usually not covered by the apprenticeship system - often on a level above apprenticeship

training. This intermediate level, especially the "Fachschule"-education, has been completely abolished in the GDR.

University education was very similar in both countries although in a number of subjects more specialized in the GDR than in West Germany and of course with limited access: 11% of the relevant age cohort entered university education in 1989 compared to 19% in West Germany.

For the purpose of the study reported here, which is restricted to 15 to 19 years olds and their transitional phase from school to initial vocational training, the apprenticeship system is of major importance. The following passages therefore focus on this neglecting development in other educational sectors

The changing of the East German economy after World War II to a centrally planned economy with hardly any private sector had consequences for the further development of the structures in apprenticeship training. Whereas in West Germany more than half of the apprentices receive their training in small firms within the handicrafts, trade and service sector, the large majority of East German youngsters were trained in large industrial firms with special training centres and a large number of qualified staff. Vocational training was concentrated in large industrial combines who provided training facilities for other firms or industrial branches in the region too. Apart from the productive sector a number of social welfare facilities like nursery schools, medical care, catering etc., belonged to the combines. The training for the related occupations very often was also done by the combines' training centres.

The number of training places provided in the GDR was centrally planned according to the number of school leavers and according to the overall demand of the national economy divided by industrial and occupational structure as well as by region but not depending on the demand and economic situation of the establishment doing the training. Thus every school leaver not attending higher education was sure to get a training place even though not always in the preferred occupational field. In the West German market economy apprenticeship offers depend on the actual economic situation and manpower demand of single private firms. There is a strong connection between cyclical economic changes and the ups and downs in the number of apprenticeships offered. In addition, training places are offered to a large extent in those firms and economic sectors where training is less expensive because apprentices already contribute to the output. There are however few employment opportunities after training in these firms.

So in both parts of Germany young people's chances for free educational and occupational choice were limited to a certain extent for different reasons though. Furthermore in both systems apprenticeship training was not always provided by those firms or branches who offered employment so that occupational mobility after training was necessary in East and West. East German youngsters, however, had both, the guarantee of a training place and later job security whereas in West Germany greater chances for free career choices existed but also more job insecurity and unemployment risks.

Youth as a transitional phase from school to work was significantly shorter in the GDR than in the former FRG. According to data from the SOEP in 1990 the majority of the 16 to 19 year old population in the GDR was already in vocational training whereas in West Germany a significantly higher proportion of this age group still attended general education. From the 20 to 24 year olds, however, most of the East Germans already belonged to the work force whereas in West Germany a significantly higher proportion was still enrolled in vocational training or university education. (Table 2).

Even before the official reunification the East German school system and vocational training regulations were changed according to West German laws. Nothing from the GDR's educational system survived except the duration of school attendance for those aiming for the "Abitur" (it is 12 years in the majority of the New Länder and 13 years in the West German Länder). It is expected that the alteration of the institutional framework strongly affects the educational behaviour and occupational choices of school leavers and thus will lead to changing patterns in the transition from school to working life. There will be a process of deregulation and individualisation of formerly standardized collective patterns of transition leading to a prolonged transitional phase and an extension of youth in East Germany. School type choices and school attendance rates as well as occupational choice patterns will approximate those of West German youths.

This process is reinforced by the present economic instability, mass unemployment and lack of in plant training places in the New Länder due to the transformation of a centrally planned

economy to market economy accompanied by basic structural changes in the East German economy and a deep recession. The situation for apprentices became even worse because a large number of them were dismissed as a consequence of factory closures or firm privatisation so they could not finish their training.

After reunification the number of in-plant training places offered to school leavers dropped to half of the usual entrants. In 1991 and 1992 only half of the youngsters aiming for an apprenticeship place could be offered one. As a substitute, a number of out-of-firm training places were established by the government. A considerable proportion of applicants who failed to get an in-plant training place, however, decided to continue their school education in order to get higher degrees and thus improve their labour market chances. Others obtained apprenticeship places in West Germany commuting daily or at weekends to their training firm.

2. Main results from the "Youth Labour Market Monitor"

2.1 Educational attainment and educational aspirations

Compared to the fact that in the former GDR only about 8% - 9% of an age cohort left school with the Abitur degree there has been an enormous increase in educational aspirations after the "Wende": according to the cross-sectional analysis of the surveys in 1991 and 1992, 60% of all 15 to 19 year old students indicated that they want to continue their school attendance up to the Abitur (table 3). From those presently attending 9th class who have to take the decision about their preferred school type and leaving certificate during that school year, 42% voted for the Abitur, 45% for the intermediate certificate ("Realschulabschluß") and only 13% for the lowest degree ("Hauptschulabschluß").

Longitudinal analyses confirm these results: 50% of those students who were at the end of 10th grade in May 1992 stayed in school past 10th grade as the follow-up study in November 1992 survey showed. Similar results were obtained for the students of the 9th grade.

These data indicate a rapid change of educational behaviour among East German youths once they can decide freely on their future career plans. The high educational aspirations correspond to the opinion that "nowadays without Abitur labour market chances are very poor" which is agreed to by 44% of the students interviewed.

As in West Germany too educational aspirations differ by sex and socio-economic status (measured by father's educational level): a considerably higher proportion of young females and of students from an academic background tend towards the Abitur degree compared to young males and children from workers' families.

The reported changes in school attendance have persistent effects on the transitions to the various forms of vocational education. Before 1990, about 70% of 10th grade school leavers took up apprenticeship training. This proportion decreased sharply to less than 50% in the following years because half of the students decided to continue their school education (table 4).

The increased aspirations for the Abitur degree, however, do not lead to extended university entrance: in November 1992 only one third of 12th grade students wanted to start university education immediately after school compared to 55% the year before. More than one third plan to take up apprenticeship training. This unusually high proportion of "Abitur" holders not entering university but aiming for apprenticeship training might be explained by two factors: the absence of the former three-year course combining Abitur with apprenticeship training and the postponed demand of those who failed to get a training place after 10th grade due to the overall lack of training places in East Germany.

Increasing educational attainment and aspirations however are also a consequence of employers' recruitment strategies. The "Hauptschule"-certificate formerly unknown in the GDR is not yet fully recognized by employers but rather looked upon as a certificate for handicapped youth or those with learning incapacities. Since there are far more applicants than training places offered, a certain "creaming effect" with respect to the recruitment of apprentices can be observed.

Educational aspirations and intended career choices may change over time. Lack of training opportunities or changes in personnel attitudes and occupational orientation may lead to an

alteration of former plans. These developments are part of the transitional phase from school to work. The precarious economic situation in East Germany, poor labour market chances and insufficient training opportunities are likely to produce disorientation and insecurity among young people concerning their future career decisions. Longitudinal analyses of the East German "Youth Labour Market Monitor" show that within half a year (between November 1991 and May 1992) almost fifty percent changed their plans for future vocational education in total - 30% of those originally aiming for apprenticeship training and about 60% of those who wanted to attend vocational schools, university or some other kind of vocational training. More than half of the people who changed their plans postponed the beginning of their vocational education to a later date, the rest changed their plans to a different form of training, i.e. from vocational school to apprenticeship training or vice versa.

2.2 Transition from vocational training to employment

The German apprenticeship system is internationally well known for its smooth way of inserting young people into working life thus keeping youth unemployment fairly low. There are, however, two thresholds where unemployment risks arise especially in times of economic recession - at the beginning if there is a lack of in-plant training places and at the end because employers are not obliged to offer employment after the training period.

In East Germany severe problems exist at both of these thresholds due to the lack of in-plant training places and the overall high unemployment. For apprentices in the former GDR, continuous employment chances after training in the training establishment or another firm was self evident. The uncertainty whether or not they will find a job afterwards is a new and frightening perspective for them. According to the Youth Labour Market Monitor only a quarter of the apprentices interviewed believed that they had a fair chance of staying with their training firm after the final examination. The uncertainty increases with length of training: beginners are still quite hopeful whereas apprentices in their last year seem very pessimistic about their employment chances (table 5). These differences reflect not only the relative distance to the end of training but also the different economic situation of the various training firms. First year apprentices are currently more often employed in newly founded or economically well-to-do firms especially in the handicraft or service sector whereas the majority of apprentices in their last year are still working in companies which already existed in the GDR and have difficulties in surviving or adjusting to a market economy.

The actual employment chances after training are insufficient: of those who finished their apprenticeship training in 1992, only 42% stayed with their training establishment afterwards, 46% were dismissed, the rest quit the job voluntarily. 21% of those who did not stay with their training firm were unemployed at the time of the interview (November 1992), another 8% continued their education and 5% were doing their military service (table 6)

Final remarks

The change in East German society is still ongoing. The process of adjusting to a market economy and to the new institutional framework in education and training will take time. So far, change in educational behaviour among young people can be observed that indicates a rather rapid adjustment to West German developments. This concerns choice of school type as well as educational aspirations and plans for vocational education. The trend towards longer and higher education seems to be partly a voluntary one. But it is also reinforced by the instability and insecurity of the economic situation in East Germany and the lack of in-plant training opportunities and employment prospects. Under these circumstances the expected extension of the transitional phase from school to working life will happen within a fairly short period.

Notes

1) "Wende" is the German expression for the revolution in the GDR in 1989 leading to the abolishment of the GDR-regime, a radical change in the political and economic system in East Germany and to the reunification of the two Germanys.

Table 1
IAB-Youth-Labour-Market Monitor: A longitudinal survey on East German youths (15 - 19 years): overview of main variables included in the various questionnaires

Population investigated	Date of survey					
	May 91	Nov 91	May 92	Nov. 92	Nov. 93	Nov. 94
Age class (year of birth): 19..	72-75	72-76	72-76	73-77	74-78	72-79
Main Variables						
Education/employment status	x	x	x	x	x	x
Level of general education	x	x	x	x	x	x
Educational aspiration	-	x	x	x	x	x
Level of vocational education	x	x	x	x	x	x
Plans for (further) vocational education	x	x	x	x	x	x
- type of training	x	x	x	x	x	x
- vocational counselling	x	x	x	x	x	x
- searching strategies	x	x	-	-	x	-
- East-West-mobility (willingness)	x	x	x	x	x	x
Apprenticeship-training						
- year of training	x	x	x	x	x	x
- occupational field	x	x	-	x	x	-
- type and size of training establishment	x	x	x	x	x	x
- economic sector	x	x	x	x	x	x
- training place in West-Germany	x	x	x	x	x	x
- difficulties finding training place	-	-	-	x	x	-
- employment perspectives after training	x	-	x	x	x	x
- satisfaction with training	-	x	-	x	x	x
- out of firm training: quality/advantage/disadvantage	-	-	-	x	-	-
Unemployment/jobsearch	x	x	x	-	-	x
Family						
- education/employment status of father/mother	-	-	x	-	x	x
- size of family	-	-	x	-	x	x
- living situation	x	-	x	-	-	x
Attitudes with respect to:						
- individual consequences of German reunification/job, private life)	-	x	-	-	-	-
- willingness to accept other than preferred training place	-	x	-	-	x	-
- training and employment perspectives in different occupational fields	-	x	-	-	x	-
- work ethic, values in life	-	-	-	-	x	x
- education and employment situation of women	-	x	-	-	-	x
- Sharing work and family responsibilities between partners	-	x	-	-	-	x

Table 2

Youths aged 16 to 24 years in the GDR and FRG according to their educational and employment status in 1990 (1989) - percent -

	GDR: SOEP ⁴⁾ 1990			FRG: MZ ⁵⁾ 1989		
	16-19 years	20-24 years	< 25 years	16-19 years	20-24 years	< 25 years
Full-time students ¹⁾	} 32	10	19	50	16	29
Other persons not employed				2	7	5
Apprentices ²⁾	51	1	20	33	8	19
Total: not employed	83	11	39	85	31	53
Employed	14	74	52	} 10	60	40
Released (baby-year-etc.) ³⁾	2	9	6			
Military service	1	4	3	1	4	3
Unemployed	0	0	0	4	5	4
Total	100	100	100	100	100	100

1) in the FRG: including participants in work preparation courses

2) apprentices in recognized training occupations including those in special Abitur-courses

3) int the FRG: included in figures for employed

4) SOEP = socio-economic panel

5) MZ = Mikrozensus (microsurvey)

Sources:

DIW: Das Sozioökonomische Panel: Basisberechnungen 1990 in der DDR

Microsurvey 1989 as well as internal calculations based on the IAB's total calculations (BGR)

from: Schober (1991), p. 28

Table 3: Students in general school education, 15 - 19 years old, according to aspired educational level by sex, school year and vocational education of father, November 1992 - percent

Aspired school certificate	Total	Female	Male	Students		Vocational education of father	
				7 - 9 th grade	10th	Skilled worker	Academic education
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
"Hauptschulabschluß"	5	3	7	14	1	7	2
"Realschulabschluß"	35	33	39	44	52	47	19
"Abitur/Fachhochschulreife"	60	65	54	42	47	46	79
Total	100	100	100	100	100	100	100
Number of cases (unweighted)	1,644	838	806	512	616	606	546

Source: IAB-Projekt 4-402, Youth Labour Market Monitor, 3rd and 4th follow-up survey

Table 4:

Percentage of 15 to 19 year olds who want to enter vocational education or training in the next term, in May 1991, November 1991, May 1992 and November 1992 by type of vocational education or training

		Total	Status at the time of interview			
			Students in grade ...			Employed or unemployed, military service etc.
			7 - 9	10	12 - 13	
Number of cases (unweighted)						
(1) May 1991		1,943	467	596	23	631
(2) November 1991		2,571	509	718	124	832
(3) May 1992		1,980	430	574	73	629
(4) November 1992		2,667	512	616	196	856
Percentage of youths who want to enter vocational education - total						
(1) May 1991		24	/	65	87	23
(2) November 1991		25	17	61	85	15
(3) May 1992		25	11	55	75	19
(4) November 1992		25	14	54	79	16
Type of education or training						
Apprenticeship	May 91	14	/	53	31	10
	Nov. 91	13	13	49	23	4
	May 92	13	9	45	22	6
	Nov. 92	16	12	48	35	6
College/university	May 91	3			44	
	Nov. 91	6			55	
	May 92	4			47	
	Nov. 92	2			32	
Vocational school/technical college	May 91	2				
	Nov. 91	2				
	May 92	3				
	Nov. 92	3				
Retraining	May 91	4				9
	Nov. 91	4				7
	May 92	5				9
	Nov. 92	2				4

Source: Youth Labour Market Monitor, 1st - 4th follow-up surveys

Table 5:

Apprentices in the new Länder according to their estimation on future employment opportunities after training by training year and economic sector, May 1992

Probability of employment in the training establishment after training	Total	Industry	Handicraft	Public Service	Others
a) All apprentices					
probably yes	26	6	36	29	34
probably no	27	39	21	20	26
uncertain	31	40	26	36	24
unwilling to stay	14	15	10	15	16
no answer	2	-	6	-	-
Total	100	100	100	100	100
Number of cases (unweighted)	384	86	123	77	40
b) Apprentices in 1st training year					
probably yes	39	/	40	31	/
probably no	15	/	18	18	/
uncertain	31	/	21	37	/
unwilling to stay	7	/	4	12	/
no answer	8	/	17	2	/
Total	100	/	100	100	/
Number of cases (unweighted)	158	19	58	47	12
c) Apprentices in 2nd - 4th training year					
probably yes	20	5	34	/	/
probably no	33	42	22	/	/
uncertain	31	37	30	/	/
unwilling to stay	16	16	14	/	/
no answer	-	-	-	-	/
Total	100	100	100	100	
Number of cases (unweighted)	206	68	65	32	28

Source: see table 2 - 4

Table 6:**Apprentices under 25 years in the new Länder who finished their training after May 1992: employment status in November 1992 - percent -**

Employment status of apprentices half a year after training	Apprentices who finished their training in 1992
employed	65
- in training establishment	42
- in other firm	23
unemployed	21
student	8
military service	5
total	100
Percentage of former apprentices not employed in their former establishment, total	52
reason for leaving training establishment	
- no working contract after training offered	41
- dismissed	5
- quit voluntarily	6

Source:

IAB-Projekt 4-402, Youth labour market monitor in the new Länder, 3rd and 4th follow-up survey, May and November 1992

Session 2

Labour market itineraries of secondary school-leavers

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Summary report

Introduction

Reading the texts, the impression we gained was much like our reaction at the time of the publication of *"L'introuvable relation formation-emploi"*. We find it extremely difficult to activate our collective memory, to capitalize on the result of our empirical research, to transfer our findings from one situation to another, to put our work on a theoretical level.

This general impression, which is logically reinforced when dealing with research work done on a larger, European scale for instance, raises questions about our research methods, our reading and communication techniques, our ability to confront issues. It should lead to additional efforts being made in the preparation and distribution of research results.

The papers of this session will be reported in a classical manner: area covered, main results, methodological issues and theoretical stakes. The main ideas put forth by the authors will be summarized, and we will present a few rapid questions that can be investigated at greater depth in future discussion.

1. The population groups investigated

The six papers present descriptive results of longitudinal studies and, in some cases, a more general analysis of itineraries.

- A 15-month-long investigation by Simon Cabitsis and Adinda Verheerswynghels surveying *"1991 graduates of transitional or vocational technical secondary education"* in the Charleroi regions and in the French-speaking Brabant province;
- A 24-month-long investigation by Simon Cabitsis, Nouria Ouali and Andréa Rea examining *"the vocational integration itineraries of young immigrants living in Brussels compared to those of a group of young Belgians"*, *"coming mainly from technical and vocational streams"*;
- An investigation by Jordi Planas looking back at three years in the life of a representative sample of 31-year-olds in the Barcelona region;
- A study by Thomas Couppie and Patrick Werquin based on two French surveys carried out by CEREQ in the last few years *"through repeated observation of young people who could be potential beneficiaries of integration measures"*;
- An assessment of several research projects carried out since 1985 in Flanders by Jan Denys on the topic of *"young people in transition between technical and vocational secondary education and employment"*;

- A synthesis prepared by Didier Demazieres and Brigitte Monfroy based on *"the survey of the career paths of young graduates of general or technical secondary education carried out by CEREQ in December 1989"*.

Of course, the diversity of population groups, locations and times involved in the surveys makes in-depth comparison somewhat difficult, but it cannot stop us from culling out a number of significant results.

2. Results

2.1 Characteristics of vocational integration

Several researchers have examined changes in status and the periods spent in one status in the early years of active life. The following points emerge from these investigations:

- that certain population groups get stuck in unemployment, such as *"young non-EC foreigners"* (Cabitsis-Ouali-Rea, p. 131);
- that the speed of integration plays a vital role in its stability: *"the integration of young people is thus progressive, but it is accompanied by an improvement in employment status" (...)* *"we could postulate that rapid integration in a classical type of job might provide a certain stability in this status, a situation which tends to apply to men more than to women"* (Cabitsis-Verheerswyngheles, p. 74 and 75);
- that the beginning of active life plays a vital role, particularly among less qualified young people: *"for young people with a low level of education (...) one could surmise that the initial confrontation with the employment market and with the process of learning its rules of operation constitutes a decisive test"* because, unlike other young people, they are forced to develop new courses of action (apprenticeship, job-seeking, project construction), which become a *"process of 'secondary socialization'"* (Demazieres-Monfroy, p. 101);
- that *"post-school unemployment is a good indicator of long-term career prospects"* (Denys, p. 105).

Another issue is matching rate. According to Denys, the divergence between skills learned at school and job contents is difficult to assess, but this divergence is perhaps not as important as is often claimed (p. 107). The question of "good" and "bad" integration, raised by Planas, could then also be looked into. Furthermore, a significant difference has been established between the integration projects described in interviews and the actual actions taken by the young people (Cabitsis-Ouali-Rea, p. 120 and 121).

2.2 Differentiating variables

Two authors - Planas (p. 113) and Demazieres-Monfroy (p. 95, 96) - insist particularly on the complexity and great diversity of young people's itineraries, even given an equivalent level of education. But all investigate the influence of a number of variables on the development of the itineraries. To a large extent, they confirm effects that are already known but seem to apply to several countries nowadays. An investigation covering all of Europe would certainly be interesting in this respect.

There is, however, an obvious problem involved in combining and examining the effects of the variables affecting itineraries. One interesting effort in this direction is the attempt by Couppe-Werquin (p. 138 - 142) to present a hierarchy of these variables on the basis of a duration model. There are, of course, several empirical findings on differentiation variables, but effects are sometimes contradictory and often difficult to raise to a theoretical level.

All authors point out the important role played by sex in systematic differentiation: thus, according to Cabitsis-Verheerswyngheles (p. 85), *"young women enjoy 'privileged' access to precarious or part-time employment; they experience more frequent periods of unemployment and their integration is of an altogether slower pace and lower quality"*. But according to Couppe-Werquin it would seem that the role of this variable is evolving to a point where it could be surmised that we are heading for a homogenization of future career prospects on the basis of sex.

The determinism of the education variable, another well-known aspect, is demonstrated by several authors, particularly with regard to the decisive advantage of a school diploma, of the effect of level and nature of training: the advantage of purely vocational training areas, opposition between tertiary-sector and industrial specialization. It should not, however, be interpreted in terms of strict causality, because in the presence of equivalent levels and specialization, situations and itineraries remain "*contrasted*"; this is, in any case, the opinion of Demazieres-Monfroy (p. 95).

The personal variables are also highly significant. According to Demazieres-Monfroy once again, an essential role is played by social origin (particularly from the point of view of vocational status and, on a broader basis, of attitude to work), a role which is often underestimated in investigations, in spite of the fact that there are indeed "*socially determined inequalities affecting entry into active life*" (p. 98). Family situation (especially the opposition between living alone or with a partner and the significant role of family and social networks towards integration) is also an essential aspect.

One paper, the one by Cabitsis-Ouali-Rea, analyses the influence of nationality.

The influence of these variables on the employment market is, strangely enough, not particularly well examined, with only one text pointing out the influence of the sector of activity, particularly the opposition between the commercial and the non-commercial sector. The effect of time spent in integration measures should also be mentioned; it is often irregular, which raises the question of the effectiveness of such measures.

3. Methodological issues

3.1 The advantages of longitudinal studies

All of the papers presented confirm their authors' now widespread conviction that longitudinal surveys are a must for an analysis of transition phenomena. Three arguments to this effect are proposed.

Only longitudinal studies allow for the dynamics of access to employment to be represented, for successions of statuses to be shown; in short, they alone allow the analysis of vocational integration as a process. Such arguments are presented in the two Belgian papers and in my own text. These investigations also make it possible to validate the hypothesis of a "*correlation between the very early stages of active life and vocational paths on the employment market*", in the words of Demazieres-Monfroy (p. 99, 100), who on this topic evolve the idea of "*an integration map consisting of concentric circles with stable employment in the centre and unemployment on the periphery*", circles that are more or less accessible in individual cases.

The second argument is obvious: the variety of paths and the complexity of situations involved can only be studied in this type of survey.

And finally, these surveys make it possible to measure the effective stability of the status of integrated young people and improve the analysis of forms of precariousness. Thus Couppie-Werquin demonstrate that "*permanent contracts have undeniably lost their value and are no longer a synonym of stability in the initial integration phase*", and that "*unemployment is not a situation where one remains over a long period, at least without interruption*" (p. 137). They pave the way for an in-depth analysis of precariousness, which is often examined from a static point of view, although situations can change considerably in the space of three years (cf. Denys, p. 106).

3.2 Methodological problems

The very complexity of the processes studied makes them difficult to describe in a simple form. Several points are made by the authors:

- the correct choice of merging level: Couppie-Werquin point out the "*disadvantage of merging too many possible situations on the labour market*" (p. 143);
- the best possible observation period: 15 months, 24 months, 3 years ... often an arbitrary choice, or a choice based on the feelings of the young people themselves, as in Planas'

study: *"a great majority view their vocational status as having been redefined and significantly marked by the work experience acquired in the course of the three years following their leaving school"* (p. 111);

- the way of constructing timetables (month, trimester, event-based ...) and status charts;
- the correct definition of statuses: the construction of relevant categories (the Belgian surveys propose seven statuses, which closely correspond to what is being done in France, for instance), the determination of relevant differences (according to Denys, p. 105, the difference between unemployment and holiday is not always clear);
- the difficulty involved in assessing matching (Denys' "matching rate" - p. 107 - is worthy of discussion) in terms of levels, specialization and skills.

Analysis and interpretation involve, of course, the construction of typologies for successions of statuses and trajectories. In this respect, several suggestions could be discussed:

- the typology of 9 trajectories, constructed by Cabitsis-Verheerswynghels (p. 83) and taking into account *"both successions of statuses and the duration of each status"*;
- the seven types of trajectories proposed by Cabitsis-Ouali-Rea (p. 132 - 133), taking into account *"primarily the status currently held, the duration of the status and the direction of changes in status"*;
- the various paths constructed by Planas (p. 112);
- the typical profiles established by Couppie-Werquin (p. 142 - 143) according to the length of unemployment periods.

And finally, data has been exploited mostly on the basis of relatively simple statistic tools, or more elaborate ones such as duration models. But in any case it would appear that the data collected is strongly under-used and that there is a great deal of difficulty in ordering the diversity of situations, in getting beyond the complex descriptive level towards the elaboration of convincing interpretations. This is undoubtedly a research direction that ought to be followed.

In this respect, we must emphasize the idea developed by Demazieres-Monfroy according to which it would be necessary to combine research approaches: *"the elaboration of this type of theory presupposes that complex methodological processes are implemented, making it possible to grasp, on an empirical and theoretical level, vocational integration as a process which is both biographical and structural and produced by social and educational conditions that are relatively similar and producing strong divergences and highly contrasted histories (...); they imply that investigations should be carried out by means of questionnaires for young people (which already takes place in the current longitudinal statistic surveys), investigations among the network of institutions and companies involved and examination on the basis of non-directed interviews on the manners in which young people experience their period of entry into active life and construct integration projects"* (p. 102).

4. Theoretical approaches

On this level there are no significant claims made, and it remains difficult to look at integration on a theoretical basis. Demazieres-Monfroy, who ultimately are the only ones to postulate a true theoretical project, admit themselves: *"research into the vocational integration of young people constitutes a diverse field which has not led to a satisfactory and operative theory of integration"* (p. 96).

Nevertheless, some of the authors do attempt to view their empirical work from a theoretical angle:

- Cabitsis-Ouali-Rea (p. 117) refer to the three hypotheses made with regard to immigration: dualization and ethnostratification of jobs, reproduction of social positions and underskilling, hierarchization of integration;

- Denys (p. 105, 106) deals with the main theories of post-schooling unemployment: human capital, waiting queue, job-seeking.

Others work on a conceptualization of integration. Thus Planas (p. 111) bases his notion of socio-vocational integration on the papers of J. Vincens: those on dualization and those viewing young people as being actors of their future career prospects, leading to the following definition: *"a person achieves socio-vocational integration and terminates his/her initial training when his/ her employment itinerary redefines or repositions his/her vocational status to conform with initial training"* (p. 111) ... which leaves untouched the problem of conformity criteria.

Another question worthy of mention is the issue raised by Demazieres-Monfroy, claiming that *"vocational integration could be theoretically limited by the fact that the object "integration" would not be a new or autonomous phenomenon, but would simply represent a sub-set, even a chance of social mobility, regulated by the same rules as earlier"* (p. 99). This confirms the necessity to develop research on the overall set of mobility processes.

And finally, we should remember the implicit reference made by these authors to the notion of vocational transition as we have been defining it since 1980: *"we have opted for a dynamic interpretation of the notion of vocational integration, considering it a process organized in an institutional manner and traversed by selective movements"* (p. 96).

These same researchers call for a combination of the two approaches, complementary because they view integration in terms of both *"social and educational inheritance of young people"* (p. 97), and of the employment market.

Conclusions: future prospects?

By way of conclusion, the authors could be asked a question: what are the priorities, the new issues which should be looked into?

- a study of the functioning of the employment market for young people and its diversity, as suggested by Demazieres-Monfroy ... but what are the hypotheses that should be established now?
- a return to the old question of adaptation between studies and careers, such as suggested by Planas as well as Denys ... but is this a relevant issue?
- an analysis of the role of the actors and their relationships, taking young people as true actors of their trajectories (Planas) and by analyzing all the actors involved (Demazieres-Monfroy) ... but how can such an ambitious aim be achieved methodologically?

The entry into employment of young people who have successfully completed their secondary technical and vocational education in French-speaking Brabant and Charleroi

General introduction

Aims of the paper

The surveys forming the basis of our proposed, detailed presentation of the routes into employment followed by young people with a comparable standard of education (secondary technical or vocational) were conducted in two regions with very different local employment markets.

The first region, "Brabant Wallon" - French-speaking Brabant, sometimes nicknamed "Wallifornia", mainly provides jobs in the service sector, has two university industrial parks involved in high-tech activities and is only marginally involved in industry; the other region, Charleroi, is one with old-style industries, has been very hard hit by the recession and has relatively few jobs available in the service sector.

Our aim is to compare the entry into employment of young people who had the same type of education (a secondary technical foundation or vocational course), qualified in 1991¹ and were questioned fifteen months later in these two very different catchment areas, and to compare the experiences of male and female respondents.

It should first be noted that, since 1991, the employment situation has again deteriorated considerably, with the re-emergence of job losses and higher unemployment. This contrasts quite starkly with the much less serious situation in 1985/1990.

Our sample is therefore made up of young people who all passed through the same education cycle. The representativeness of our results is restricted to the groups of qualified school-leavers who agreed to reply to the questionnaire in the two regions².

Questionnaire and survey method

The questionnaire

The questionnaire was divided into discrete sections:

- Family background of the young person and general information.
- Educational route at secondary level.
- Situation since completing secondary education, especially in terms of employment.

A calendar grid asking the respondent to enter his status month by month was a key component of the survey. It was, in fact, on the basis of the replies received to this question that we were able to record the dynamics of entry into employment and the movement patterns from one status to another. This information differs from all the other information we have available elsewhere and which is instant data or stock numbers.

The survey covered a 15-month period (from 1/7/91 to 1/9/92); the grid had 15 columns (one per month)³ and room for 20 different types of status (the last one giving the respondent the option of indicating one not mentioned at the outset)⁴. The route taken by each individual is therefore represented by the sequence of statuses occupied over that period⁵.

The surveys, which were conducted by post, were run by the sub-regional employment and training committees of French-speaking Brabant and Charleroi. The surveys began in July 1992 and were completed in October of the same year⁶.

As we wished to question all those who had successfully completed year 6 or year 7 of their technical or vocational education at all schools in these areas, we contacted the teaching establishments to ask for the addresses of the pupils concerned. Very few were unable to supply the information requested.

Response rates

The response rate, based on the number of usable addresses, was just over 50% in French-speaking Brabant and 45% in Charleroi. Based on the total number of young people registered in these same years⁷ for the school year 1990/1991, our "cover rate" was around 40% in French-speaking Brabant and 33.5% in Charleroi.

Females and those with a technical qualification are slightly over-represented amongst respondents in French-speaking Brabant (379 respondents in total). In Charleroi (886 respondents in all), the male/female ratios correspond to those for the registered pupils as a whole, while those having completed technical education are likewise over-represented.

Number of usable addresses received

French-speaking Brabant	740
Charleroi	2043

Official pupil numbers: school year 1990/1991

	French-speaking Brabant	Charleroi
Technical education	430	998
Vocational education	502	1674

After secondary school

Study or work? The main distinction

After secondary education, young people have to make a choice between continuing in full-time education or entering the job market.

The conflict between entering employment (the act of entering the job market) and not entering employment (in this case mainly the act of continuing in full-time education, irrespective of level) is the main factor amongst respondents.

Although they have completed training which gives them "proficiency" and prepares them to enter the job market immediately, it is noticeable that these young people - who are often over 18, the age limit for compulsory education (quite a few are older than the normal age for a

particular year) - still continue their education at least to year 7 if not to further or higher education.

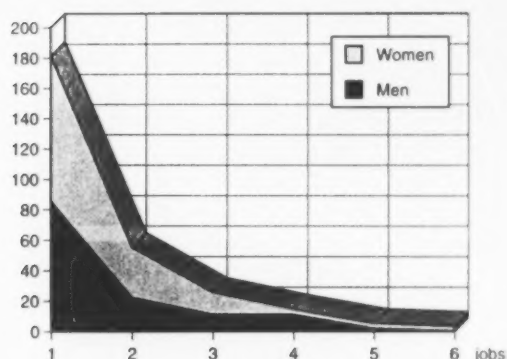
Among those who entered the job market immediately, the method and speed of entry and the type of employment obtained will form the basis of the major differences.

The replies given on the calendar grid show that in October 1991⁸ in each of the two regions over half the young people said they were continuing in full-time education, a very small percentage (3%) had likewise not entered the job market for different reasons, eg. military service or travelling abroad, so nearly 45% had actually entered the job market⁹.

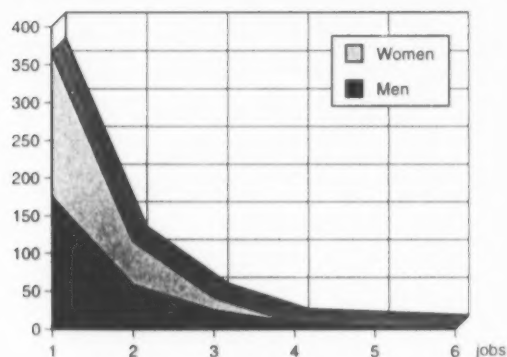
Situation on the job market:

Number of jobs held since July 1991¹⁰

French-speaking Brabant: number of jobs held during the 15-month period, by sex



Charleroi: number of jobs held during the 15-month period, by sex



The majority of young people had only one job between July 1991 and September 1992; far fewer male and female respondents had at least two jobs and, as the graph shows, hardly any had more than three jobs. As expected, and unless they failed to report jobs of very short duration, the young people did not change job very often or had only one job during the period.

Main features of the first job held

At the time of the survey, 43% of the young Brabantines and 45% of the young inhabitants of Charleroi were still in their first job, but almost the same number in both regions had lost their job. Very few had resigned of their own accord in either region.

Almost one young person in three, a large majority female, was working part-time: female respondents as non-manual workers and male respondents as manual workers. In terms of

the type of work done, the female respondents were working in health care or personal services, as clerks, shop assistants or in the hotel and catering trade. The male respondents generally said they were manual workers, without going into further detail, or that they were manual workers in industry (more often the case in Charleroi).

The young people said they had found the job mainly on their own initiative (over 40%), through family connections or through friends (over 20%); more often than not, this first job was in the area where they had completed their education.

The high proportion of part-time work and large percentage of job losses lead us to expect that these young people's first experience of employment will be overshadowed by a lack of job security.

Status of all the respondents in October 1991 and in September 1992

The replies to the calendar grid provide a wealth of information on the features, sequences, duration etc. of the statuses held by the young respondents. Before analysing the routes into employment observed, we shall look at various aspects of the entry into employment of the entire population.

The decision to take October 1991 as the reference point for the commencement of the process of entry into employment was based on the fact that, as already reported, numerous young people were on holiday during the preceding months and so not on the job market (NJM).

Male respondents

French-speaking Brabant: changes in the circumstances of qualified male school-leavers between October 1991 and September 1992

	Oct. 1991	Sept. 1992	A ¹¹	B ¹²
Stable employment	17 (12%)	26 (18.6%)	70%	46%
Insecure employment	23 (16.2%)	22 (15.5%)	35%	36%
Vocational training	2 (1.4%)	3		
Jobseeking	23 (16.2%)	21 (14.8%)	35%	38%
Full-time education	69 (48.6%)	35 (24.6%)	49.3%	100%
Military service	3	21 (14.8%)		
Not on job market	5	13		

Charleroi: changes in the circumstances of qualified male school-leavers between October 1991 and September 1992.

	Oct. 1991	Sept. 1992	A	B
Stable employment	25 (8%)	60 (20%)	80%	33%
Insecure employment	49 (15.7%)	33 (11%)	20%	30%
Vocational training	3	3		
Jobseeking	73 (23.4%)	85 (28.5%)	34%	29%
Full-time education	149 (47.8%)	62 (21%)	41%	100%
Military service	7	41 (13.8%)		
Not on job market	6	14 (4.7 %)		

In October 1991 close to 50% of the young people were on the job market. In September 1992, more and more young male respondents were trying to obtain employment, so it stands to reason that fewer were continuing their full-time education (the percentages go down from 48 to 24% in French-speaking Brabant and from 48 to 21% in Charleroi). Overall, the figures for paid-employment status go up from 28% to 34% in French-speaking Brabant and from 24% to 31% in Charleroi; the stable-employment status figures also increased by 7% and 12% respectively.

The young people's entry into employment is therefore only gradual but is accompanied by an improvement in job security.

Column A shows that 70% (in French-speaking Brabant) and 80% (in Charleroi) of male respondents who held a stable job in October 1991 had the same status at the end of the period (this does not necessarily mean that their route followed a straight line or that they did not change or lose their job during this 15-month period). Conversely, in September 1992, they accounted for 46% of all male respondents with a stable job in French-speaking Brabant and 33% of those with this status in Charleroi.

35% of male respondents from French-speaking Brabant and 20% of those from Charleroi who were in paid but insecure employment in October 1991 still had the same status at the end of the period. They accounted for 36% and 30%, respectively, of all male respondents in insecure employment in September 1992.

Finally, nearly 35% of male respondents who were job seeking in October 1991 were also job seeking in September 1992.

Female respondents

French-speaking Brabant: changes in the circumstances of qualified female school-leavers between October 1991 and September 1992

	Oct. 1991	Sept. 1992	A	B
Stable employment	14 (7.8%)	35 (19.4%)	57%	23%
Insecure employment	55 (12.2%)	33 (18.3%)	36%	24%
Vocational training	6 (3.3%)	5 (2.8%)		
Jobseeking	40 (22.2%)	42 (23.3%)	37.5%	35.7%
Full-time education	95 (52.8%)	50 (27.8%)	53%	100%
Not on job market	3 (1.7%)	14 (7.8%)		

Charleroi: changes in the circumstances of qualified female school leavers between October 1991 and September 1992.

	Oct. 1991	Sept. 1992	A	B
Stable employment	29 (6%)	56 (12.4%)	65.5%	34%
Insecure employment	32 (6.7%)	61 (13.5%)	21.9%	11.5%
Vocational training	4	10		
Jobseeking	162 (34%)	192 (42.4%)	54%	45.8%
Full-time education	234 (49%)	113 (25%)	47%	97%
Not on job market	16	21		

The trend towards entry into employment amongst the female respondents seems even more marked. It is, nevertheless, difficult to draw a true comparison between the two groups since military service intervenes to disrupt the start of the male respondent's career.

At the end of the period, half as many of the female respondents are continuing their full-time education, the percentage of paid jobs has virtually doubled and, at the same time, the proportion engaged in job seeking has increased: more sharply in Charleroi, moreover.

The percentages of female respondents in stable employment in October 1991 and with the same status in September 1992 are 57% in French-speaking Brabant and 65.5% in Charleroi. These rates are still lower than those observed amongst male respondents. In Charleroi, female respondents in insecure employment are still in the majority.

Of all the female respondents who were in stable employment at the end of the period, 25% of these had had the same status in October 1991 (in French-speaking Brabant), the corresponding figure for Charleroi being 34%.

Nearly 40% of female respondents in French-speaking Brabant and 22% of those in Charleroi who, in October 1991, were in insecure employment were still in that situation in September 1992.

Finally, one female respondent in three in French-speaking Brabant and one in two in Charleroi who were job seeking in October 1991 were still in the same situation in September 1992.

We might assume that rapid entry into stable employment leads to a certain amount of security in that status, from which males benefit more often than females. This is only a hypothetical assumption because the observations on which it is based are limited and cannot automatically be extrapolated to the whole of the period.

This is why we shall pay particular attention to the global and individual analysis of the routes followed by the survey respondents.

Routes taken by all respondents

Monthly sequence of statuses held by all respondents

One way of analysing the different situations in which the young people found themselves is to look at the status of all respondents month by month throughout the survey period.

In other words, to look at the situation in which all respondents find themselves at a time t and at a time $t+1$ if we look at the months in successive pairs.

The result obtained is a matrix (see example in the Annex) with seven lines corresponding to 7 "departure" statuses and seven columns corresponding to 7 "arrival" statuses.

The fact that the greatest numbers are generally found on the diagonals of the matrix indicates that the duration for which each status was held usually exceeds one month. In some cases this finding is obvious: military service is for a specified period, as are courses (except for those who drop out), vacations etc.

As one would expect, those in employment and job seeking situations do not conform to such predictable rules.

That being the case, on this matrix the profiles across (indicating, in per cent, the destination status into which a given status has changed) and the profiles down (indicating the original status which has changed into a given status) show that, of all those who are in stable or insecure employment or are job seeking at any one time, a very large majority had the same status the month before.

Conversely, of the sub-populations with one of these three statuses at any one time, a large majority still had that status the following month.

The "arrivals" in these statuses (a considerably smaller percentage) have mainly set out from the following points of origin:

- insecure employment and job seeking, leading to stable employment,
- job seeking and education, leading to insecure employment,
- insecure employment and education, leading to job seeking.

The "departures" from these same statuses have the following main destinations:

- job seeking or departure from the job market (mainly for holidays), having relinquished stable employment,
- job seeking, stable employment, departure from the job market (mainly for holidays) and education¹³, having relinquished insecure employment,
- insecure employment first and then stable employment, having relinquished job seeking.

In general, the trends indicated above apply to both regions and both sexes. Some differences can be noted, however, eg. when it comes to the numbers moving between specific destinations and points of origin, female respondents moved more frequently from employment status to job seeking.

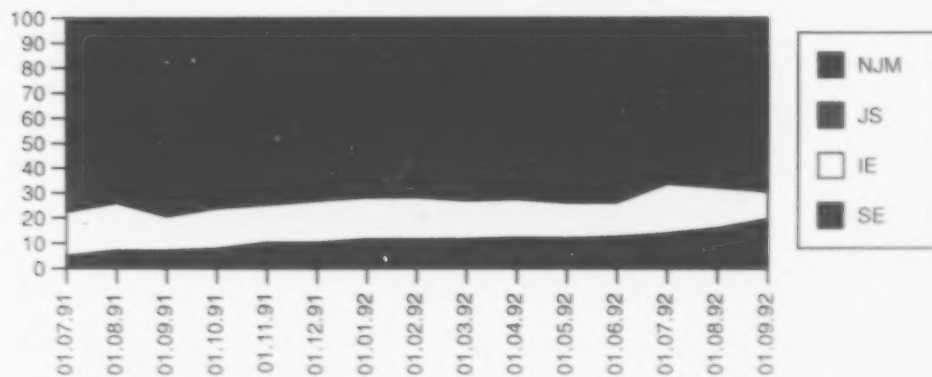
Another way of approaching the changes that take place within the groups of respondents is to look at the overall monthly trends that emerge throughout the survey period.

To this end we amalgamated the seven statuses defined above into four broad categories: SE (stable employment), IE (insecure employment), JS (job seeking plus vocational training) and NJM (not on the job market, including students (studying or on vacation), those on military service and those not looking for a job).

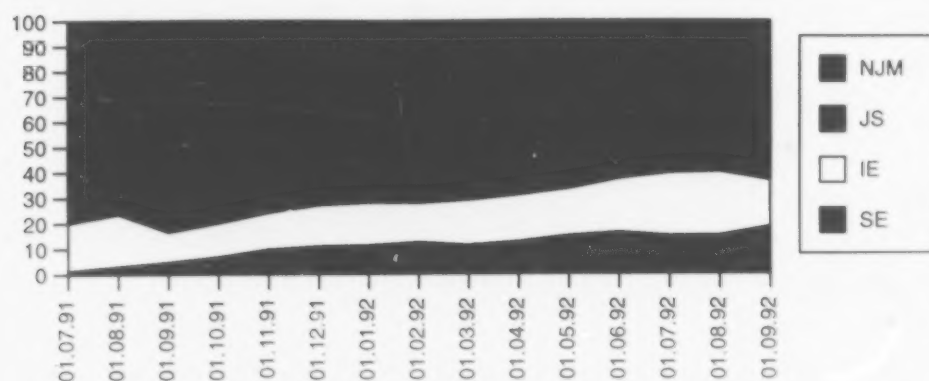
French-speaking Brabant: percentages of SE, IE, JS and NJM (male) from 1/07/91 to 1/09/92



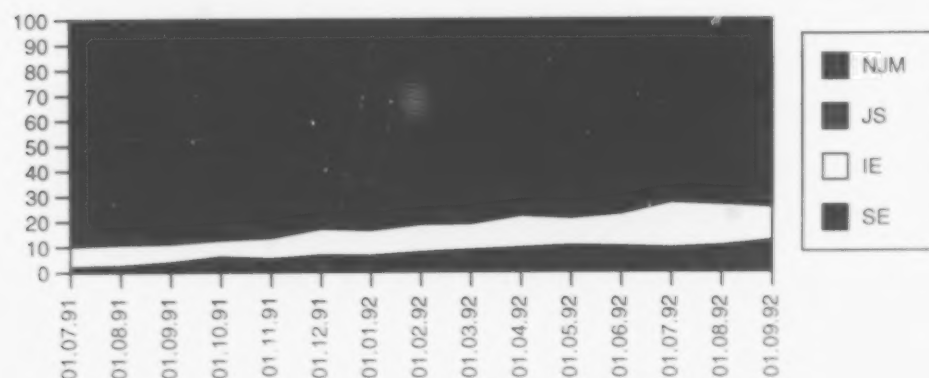
Charleroi: percentages of SE, IE, JS and NJM (male) from 1/07/91 to 1/09/92



French-speaking Brabant: percentages of SE, IE, JS and NJM (female) from 1/07/91 to 1/09/92



Charleroi: percentages of SE, IE, JS and NJM (female) from 1/07/91 to 1/09/92



In both regions the number of male respondents in stable employment increased in more or less a straight line¹⁴. Similar trends are evident among female respondents in French-speaking Brabant: paid employment increased overall and stable employment, albeit fairly rare at the start of the period, gradually accounts for a larger proportion.

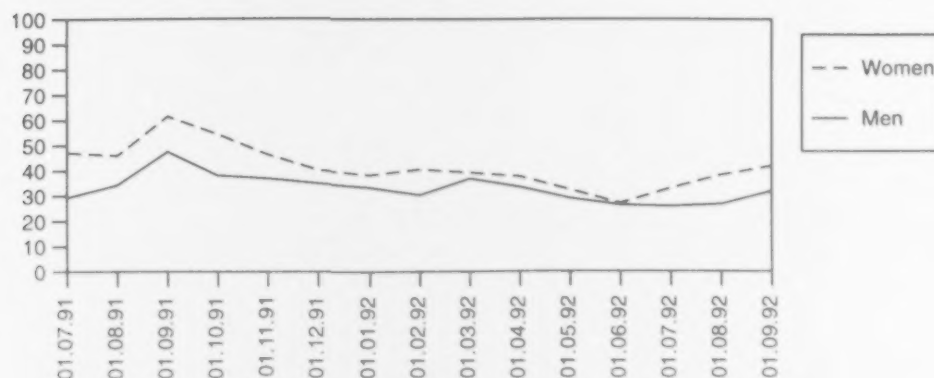
On the other hand, in Charleroi the number of female respondents in paid employment increased overall but, in September 1992, insecure employment still predominates.

Two factors distinguish male from female respondents throughout this 15-month period: the percentage of female respondents engaged in JS is much higher and they experience a more modest, delayed start to entry into employment, especially those from Charleroi.

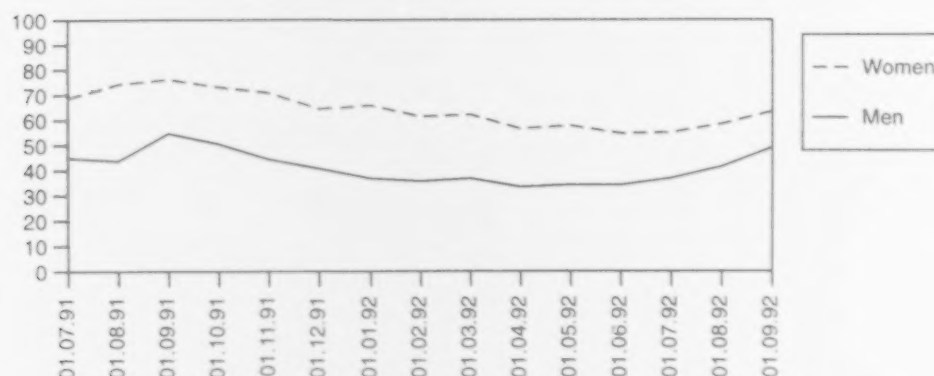
Unemployment rates

The unemployment rates presented here are calculated in a more traditional manner in relation to the total working population either in or not in employment (in other words all those who come under the heading of entry into employment: SE, IE, JS).

French-speaking Brabant: change in unemployment rates, by sex



Charleroi: change in unemployment rates, by sex



At the start of the period, the unemployment rates are very high: even higher in Charleroi than in French-speaking Brabant (where one out of two female respondents and three out of ten male respondents are job seeking compared with 7 out of 10 female respondents and 4 out of 10 male respondents in Charleroi).

These rates show a tendency to go down gradually, but female respondents in Charleroi continue to suffer. The rates go up again systematically at the end of the period, i.e. at the end of a school year: some of the respondents were continuing their studies, particularly in year 7 of vocational training. These "new arrivals on the job market" are partly the reason for this new increase in the number of job seekers.

The job seeking group is therefore left by outflows of job seekers who, for example, find employment or go to do their military service; the group is also joined by those who have lost their jobs or completed their studies. It must, however, be remembered that some of these young people have already experienced 15 months of uninterrupted inactivity.

Changes in and duration of status

In order to explain the changes from one status to another in more detail, we studied only the movements between these statuses as experienced by the respondents throughout the fifteen-month survey period.

We are therefore excluding those who had the same status from July 1991 to September 1992.

Since this no longer involves a monthly report, this approach enables us to determine the average duration of the status prior to movement, to highlight the most frequent changes, their "destination" (arrival status), their "origin" (departure status) and the number of people involved in these changes.

Order of magnitude and average duration¹⁵ of certain statuses

Stable employment

Looking at the movements between statuses, it can be seen that male and female respondents in French-speaking Brabant and male respondents in Charleroi had proportionally equal opportunities for entry to stable employment; not so the female respondents in Charleroi. By and large, male respondents were in this type of employment for slightly longer average periods.

Insecure employment

The percentages of young people in French-speaking Brabant and of male respondents in Charleroi entering insecure employment are identical. Here again fewer female respondents in Charleroi entered this type of employment. The average period of insecure employment is longest for male respondents in Charleroi and shortest for female respondents of the same region.

Job seeking

The young people in the Charleroi region were, overall, more often to be found in a job seeking situation. In each region it was the female respondents who experienced the longest average periods without employment.

In French-speaking Brabant and amongst male respondents in Charleroi, the longest average period of time is accounted for by stable employment. In the case of female respondents in Charleroi, the average job seeking time is the longest.

Whether in terms of entry to stable or insecure employment, seen from the angle of the lengths of time spent in the different types of job or in relation to the length of time spent without employment, it is clear that female respondents in Charleroi find it hardest to obtain stable employment.

In the main, during the survey period relatively few young people had the opportunity to enter stable employment where they generally remain for the longest average period of time. On the other hand, a greater number were in insecure employment but for a shorter average period of time.

Stable employment is therefore associated with security; less people enter it, even if they spend longer in it. On the other hand, insecure employment makes for instability: more young people enter it but for generally shorter periods of time. This situation has a negative side since it gives rise to a considerable degree of mobility and a positive side since it enables a larger number of young people to enter employment.

Commonest changes of status and periods of time spent in these statuses - by sex

Following the loss of stable employment

Proportionally speaking, male respondents lost a stable job less often than female respondents but this generally happened after a shorter average period in that employment.

Movement from stable employment to job seeking is more frequent than movement between stable employment and insecure employment.

Following insecure employment

After losing an insecure job, female respondents were more often unemployed than male respondents. More male respondents therefore moved from insecure employment to stable employment, but this happened after they had been in insecure employment for a longer average period.

In French-speaking Brabant, female respondents held their insecure jobs longer than male respondents.

In Charleroi, the periods of time after which male and female respondents lost insecure employment to find themselves unemployed were identical.

Multiple transfers between insecure employment (jobs held for short periods, often less than 2 months) and education or holidays apply more especially to students who take vacation jobs.

Time spent job seeking

In French-speaking Brabant, more female respondents found stable employment after a shorter job seeking period than that spent by their male counterparts. In the same region the percentages of male and female respondents who found insecure employment were about the same, but the job seeking time was shorter for male respondents.

In Charleroi, the proportions of male and female respondents finding either stable or insecure employment were about the same but in each case the time spent job seeking was longer for female respondents.

At the end of school holidays or vacation

Everywhere, at the end of school holidays or a vacation, a large majority of young people continued their full-time education.

Of those who entered the job market, in French-speaking Brabant and amongst male respondents in Charleroi, the percentage of young people finding either stable or insecure employment exceeded the percentage of job seekers. Only amongst the female respondents in Charleroi was there a larger number of job seekers overall.

The proportion of insecure jobs held is always higher than the proportion of stable jobs.

Main statuses at the end of the period

In both regions a large proportion of young people were continuing their education. In French-speaking Brabant, students outnumbered job seekers while the situation was reversed in Charleroi.

At the end of the survey period, the differing situation in the two regions was confirmed.

In French-speaking Brabant, the proportion of young people in paid employment exceeded the proportion of job seekers. Insecure employment slightly predominated amongst female respondents, while stable employment predominated amongst the males.

Nevertheless, male and female respondents held a stable job in comparable proportions, although the period for which female respondents had held a stable job was shorter.

Although overall the situation of female respondents on the job market was less favourable, the differences observed between the respective circumstances of male and female respondents were less marked here.

In Charleroi, on the other hand, the employment situation was generally less favourable at the end of the period and differences between the sexes were much more pronounced.

In general a higher proportion of female respondents were job seeking than were in paid employment, and their period of unemployment was longer.

Female respondents in employment were mainly working in an insecure job which had been held for less time than stable female employment; in fact, female respondents had still held their jobs for less time than male respondents.

Amongst male respondents, the proportion of those working was very slightly higher than the proportion of job seekers. Stable employment predominated and exceeded that of female respondents, but stable jobs had been held for less time than insecure jobs.

Individual routes

We shall take two complementary approaches in an attempt to describe the individual routes followed by the young people.

First, we shall identify the commonest routes by region and sex; secondly, we shall put them into broad categories according to the method of entry and nature of the employment.

Commonest routes

To identify these we needed to take account of status sequences and likewise the length of time in each status. Two major simplifications were introduced.

First, the statuses were reduced to four categories:

- stable employment - (=1)
- insecure employment - (=2)
- "unemployment" - (=3)
- in full-time education - (=4)

Secondly, the survey period was divided into three equal spans:

- from 1 to 5 months - (=1)
- from 6 to 10 months - (=2)
- from 11 to 15 months - (=3)

The routes were therefore presented as records of variable length (one line per individual) depending on the number of different statuses occupied; the periods of time were then related to these.

A few examples by way of illustration:

1	-	3
32	-	13
432	-	211
323	-	121
		etc.

- The first route presented here shows an individual who held a stable job throughout the period,
- the second route shows an individual who experienced a first period of unemployment lasting between 1 and 5 months and then found an insecure job, still held, for between 11 and 15 months,
- the third shows the following sequence: education - unemployment - insecure employment, lasting for between 6 and 10 months, 1 and 5 months and 1 and 5 months respectively,
- the fourth shows the following sequence: unemployment - insecure employment - unemployment, for periods lasting 1 to 5 months, 6 to 10 months and 1 to 5 months.

It goes without saying that some of the routes observed have a higher number of statuses with as many periods of time.

Situation in French-speaking Brabant

We shall take into account only the routes affecting at least three individuals (corresponding to 1.9% of male respondents and 1.7% of female respondents). Where the percentages of those concerned were identical, a selection was made in ascending order according to the first status observed.

Male			Female		
Status	Duration	Numbers	Status	Duration	Numbers
1. 3434	1211	20.8%	3434	1211	22.9%
2. 343	121	11%	3	3	9.5%
3. 3	3	7.8%	343	121	9.5%
4. 31	13	3.2%	32	13	3.4%
5. 34	13	2.6%	234234	112111	1.7%
6. 234234	112111	1.9%	2424	1211	1.7%
7. 32	13	1.9%	31	13	1.7%
8. 34324	12111	1.9%	32	31	1.7%
9.			34234	12111	1.7%
10.			3431	1211	1.7%

The first eight routes taken by male respondents account for 51.8% of all the routes observed; the ten routes taken by female respondents account for 55.3% of the total. In other words, in both cases more than one person in two followed one of the routes shown above.

Amongst both male and female respondents, full-time education - interspersed with holiday periods (3434 - 1211) - is the route affecting most (21% of male respondents, 23% of females).

After that, the differences between male and female respondents come to the fore: more female respondents were unemployed throughout the period (3 - 1), more were unemployed at the end of a period of study and, where male respondents rapidly entered stable employment (31 - 13), females entered insecure employment (32 - 13).

Our approach was undoubtedly simplified (as indicated above) but, at the outset, we made sure that no information was lost.

Routes 1, 5, 6 and 8 emerge clearly amongst male respondents although they all relate to those continuing their full-time education; these routes can be distinguished from each other, however, by the fact that some young people took student jobs during the vacations (2) or said they were on holiday (= not on the job market) during the summer months. We could make the same comments for routes 1, 5, 6 and 9 amongst female respondents. We shall return to this later.

Situation in Charleroi

Here our threshold will be 4 male respondents and 6 female respondents, corresponding to 1.2% of each of the two groups.

	Male			Female		
	Status	Duration	Numbers (%)	Status	Duration	Numbers (%)
1.	3	3	14.0	3	3	18.6
2.	3434	1211	14.0	3434	1211	18.2
3.	343	121	13.4	343	121	16.0
4.	32	13	3.1	32	31	2.2
5.	1	3	2.5	323	112	1.4
6.	234234	112111	1.9	234234	112111	1.2
7.	323	122	1.9	31	13	1.2
8.	21	31	1.6			
9.	31	13	1.6			
10.	21	13	1.2			
11.	23	13	1.2			
12.	321	131	1.2			
13.	3431	1211	1.2			
14.	3432	1211	1.2			

The routes shown above correspond to those followed by 60% of male and 58.8% of female respondents.

One noticeable feature is that, in this region, lack of employment lasting the whole of the period is top of the list amongst female respondents and is on an equal footing with full-time education for male respondents, full-time education being a very common route here too.

The differences between male and female respondents are more marked although their respective situations are both unfavourable.

While the sequence of the first four routes is identical for both sexes, the female respondents are slightly more without employment and the male respondents slightly more in employment. Once the fifth route is reached, the opportunities for male respondents to enter employment are slightly less rare.

By comparison with French-speaking Brabant, in Charleroi the commonest routes more often lead to an "unemployment" situation at the end of the period and this outcome systematically affects higher percentages of young people.

Classification of routes

In an attempt to report on all the routes, we set up groups which encompassed them all, including those with the lowest numbers.

It goes without saying that these categories are less subtle than those shown above since it was not possible to make certain distinctions (for example, between insecure and stable employment) in view of the small number of people involved.

This classification has 9 categories:

Full-time education (FTE):

which includes all those who were following full-time education and who were continuing with it at the end of the period without making a distinction as to whether they had had student jobs in the meantime.

Education plus job seeking (E+JS):

which includes all those in education for a year (period 2) and looking for a job during the last period.

Education plus employment (E+E):

which includes all those studying for a year (period 2) and in employment (insecure or stable) during the last period.

Job seeking (JS):

which includes those never having been in employment during the period, including those who were taking courses and failed to complete them (short periods of education preceded and succeeded by periods of unemployment).

Immediate entry (IE):

which includes those who found employment immediately and remained in it throughout the period.

Entry into employment delayed for a short period (EDS):

which includes those who spent a brief period (period 1) prior to entry into employment (generally in an unemployment situation) and who did not subsequently experience another period of unemployment.

Entry into employment delayed for a long period (EDL):

which includes those who spent a long period (period 2/3) prior to entry to employment without being employed or in education and who did not subsequently experience another period of unemployment.

Interrupted entry (Int.E):

which includes those who experienced more than one period of unemployment but who were in employment at the end of the period, plus those without employment at the end of the period but whose total periods of employment are longer than the sum of those without employment.

Unsettled entry (UE):

which includes those who experienced more than one period of unemployment, who are still in the same situation at the end of the period and whose total periods of employment are less than the sum of the periods without employment.

This is how the routes for the four sub-populations line up on the basis of these criteria (in %)

	French-speaking Brabant		Charleroi	
	Male	Female	Male	Female
FTE	33	35	20	24
E. + JS	16	12	20	19
E + E	6	8	5	3
JS	9	13	15	20
IE	3	3	6	1
EDS	6	8	8	5
EDL	3	4	4	7
Int. E	14	12	10	9
UE	10	6	11	12

The greater inclination of young Brabantines to continue in full-time education is confirmed, and this is behaviour which it is of interest to record. It can in fact be compared to a strategy by which entry to the job market is postponed. Although their situation is more favourable than that of the young people of Charleroi, the main reason for this is the fact that there are fewer unemployed both in absolute terms and at the end of a period of study. On the other hand, their achievements in terms of entry into employment, considered here merely from the viewpoint of entry during the period¹⁶, proved to be fairly similar to those of male respondents in Charleroi; only those of female respondents in the same regions are of a lesser nature.

Conclusions

We have repeatedly indicated that there are clear differences between the way in which young people in French-speaking Brabant and in Charleroi enter employment; the Charleroi region appears to be at a distinct disadvantage.

The greater vulnerability of the young people in this area is shown by the fact that the job seeking rate there is generally higher. On the other hand, analysis of the individual routes in particular shows that the percentages of young people in Charleroi who enter employment by processes with variable features are not so very different from those of young Brabantines.

More careful examination of what is happening in the two regions actually shows that, in French-speaking Brabant, a much larger proportion of young people are still in full-time education at the end of the survey period. Conversely, this means that higher percentages of total respondents in that region are postponing their entry to the job market.

That being the case, can it not be mooted that the higher unemployment rates found in Charleroi are largely due to a greater number of job seekers and not to the fact that there is less access to employment?

The disclosure of the reasons for the differences observed between these two areas with very different employment situations might therefore prove to be more complicated than was first thought.

On the other hand, there are real differences between the sub-populations of qualified school-leavers, and in both regions it is the girls who are at a disadvantage.

While young people's entry into employment is generally fraught with insecurity, while it involves delays and is only gradual - often involving a number of insecure jobs or job losses - and while it only very rarely offers access to stable, secure, full-time employment from the outset, the young men and women concerned do not experience these situations in a similar, comparable manner.

The entry of girls (let us remember that this is on a large scale) onto the job market does not follow the same mechanisms as that of boys. Everywhere, young women benefit from

"preferential" access to insecure or part-time employment, they more often experience periods of unemployment and, generally speaking, their entry into employment is slower and to a lesser type of job. The fact that these differences vary in degree between the two regions does not make them in any way less real.

Notes

¹ These are young people who have had 6 or 7 years of secondary education after primary school. The duration depends on the type of education chosen, i.e. whether they took technical training where an upper secondary education certificate (CESS) can be obtained after 6 years, with an optional seventh top-up year (evidently not many pupils take this), or whether they took vocational training where the CESS cannot be obtained until seven years' study have been completed. Although the technical education known as "technical proficiency" taken into account in our survey in theory provides access to higher or further education (university or otherwise), it is more geared towards direct entry to the job market; by contrast, a "technical foundation course" is designed to prepare pupils to continue their full-time education. Vocational training itself is primarily education which leads directly to employment although, more recently, some types of further non-university education (short courses) are accessible to holders of the CESS who have completed vocational training.

² For the sake of simplicity, we shall refer hereafter to the French-speaking Brabant and Charleroi (or to Brabantines and inhabitants of Charleroi) when we mean those who have successfully completed their education at schools in those two areas but who are not necessarily resident there.

³ For the sake of simplicity, we asked respondents to indicate their status on the first day of the month. This procedure makes it impossible to take account of successive types of status occupied within the same month. In any case, the reporting intervals used gave rise to this kind of slant. Nevertheless, in our opinion it is difficult to contemplate more frequent reporting intervals, both on organizational grounds and because it would require the respondent to exercise greater powers of memory. We therefore believe that the monthly grid does give a good picture of the general patterns of the routes even if it conceals some details of the duration of certain situations.

⁴ (permanent employment contract (PEC), fixed-term employment contract (FTC), temporary work, special employment reduction programme status, job seeking, full-time education, military service (M.S.) etc.).

⁵ The nature of the replies given and the numbers corresponding to these led us to amalgamate some groups, resulting in the formation of 7 categories initially: "stable employment" (SE) which covers PEC and the (few) self-employed; "insecure employment" (IE) which covers all other statuses (predominantly FTC and temporary work); two cover those on the job market without finding employment, i.e.:

"job seeking" (JS) which covers all job seekers regardless of administrative status (PEC, waiting periods); "vocational training" (VT) which covers those in training; the other categories cover those not (yet) on the job market, i.e.: "full-time education" (FTE) which covers all those studying full-time, irrespective of level (year 7 at secondary school, further non-university or higher university); "military service" (MS); "not on the job market" (NJM) which mainly covers respondents who say they are on holiday and (a few) others not looking for a job for various reasons (eg. they are travelling).

⁶ In Charleroi it was decided not to send a reminder to non-respondents, given the good response rate and the size of the initial population.

⁷ According to official Ministry of Education statistics.

⁸ We used this date because a large number of young people said they were on holiday in the preceding months.

⁹ 33 young people in all (19 male and 14 female) did not complete the grid for that particular period.

¹⁰ These data come from a study of the questions relating to successive jobs held and were not therefore taken from the calendar grid.

¹¹ A = individuals with a certain status in September 1992 as a percentage of those with that status in October 1991.

¹² B = individuals with a certain status in October 1991 as a percentage of those with that status in September 1992.

¹³ These last two destinations are partly accounted for by the fact that the jobs held by students during their vacations are included in the counts.

¹⁴ The sudden increases and reductions in employment observed during the long vacations are partly due to student employment contracts (usually in IE) for young people still studying and which generally last for a maximum of two months.

¹⁵ Including the average duration of statuses held in September 1992.

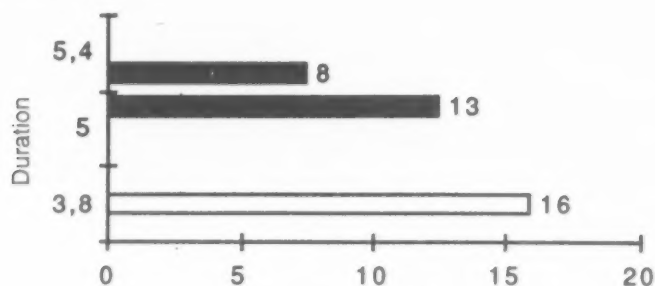
¹⁶ In this case, if account is taken of the percentages of young people who entered employment at any given moment and are still in employment at the end of the period, i.e. $E + E, IE, EDS, EDL, Int.E$.

Annex 1: Example of a matrix of statuses month by month

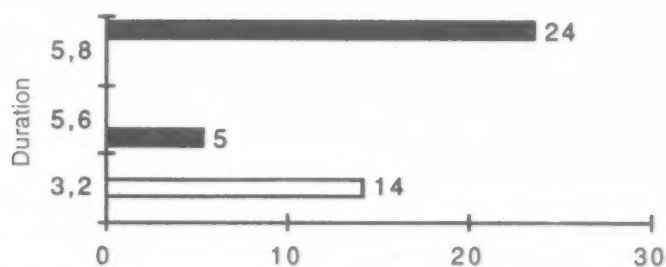
	mom2								
mom1	0	1	2	3	4	5	6	7	Grand total
0	444	6	24	2	29	29	0	11	545
1	2	524	9	1	12	5	7	15	575
2	14	27	654	2	43	49	6	55	850
3	1	3	3	83	3	0	0	2	95
4	13	32	55	5	636	2	10	10	763
5	23	7	37	1	14	1952	4	152	2190
6	0	1	1	0	4	4	164	1	175
7	22	28	71	6	50	268	4	462	911
Grand total	519	628	854	100	791	2309	195	708	6104
	mom2			Profiles-Ligne					
mom1	0	1	2	3	4	5	6	7	Grand total
0	81,5%	1,1%	4,4%	0,4%	5,3%	5,3%	0,0%	2,0%	545
1	0,3%	91,1%	1,6%	0,2%	2,1%	0,9%	1,2%	2,6%	575
2	1,6%	3,2%	76,9%	0,2%	5,1%	5,8%	0,7%	6,5%	850
3	1,1%	3,2%	3,2%	87,4%	3,2%	0,0%	0,0%	2,1%	95
4	1,7%	4,2%	7,2%	0,7%	83,4%	0,3%	1,3%	1,3%	763
5	1,1%	0,3%	1,7%	0,0%	0,6%	89,1%	0,2%	6,9%	2190
6	0,0%	0,6%	0,6%	0,0%	2,3%	2,3%	93,7%	0,6%	175
7	2,4%	3,1%	7,8%	0,7%	5,5%	29,4%	0,4%	50,7%	911
Grand total	519	628	854	100	791	2309	195	708	6104
	8,5%	10,3%	14,0%	1,6%	13,0%	37,8%	3,2%	11,6%	
	mom2			Profiles-Column					
mom1	0	1	2	3	4	5	6	7	Grand total
0	85,5%	1,0%	2,8%	2,0%	3,7%	1,3%	0,0%	1,6%	545
1	0,4%	83,4%	1,1%	1,0%	1,5%	0,2%	3,6%	2,1%	575
2	2,7%	4,3%	76,6%	2,0%	5,4%	2,1%	3,1%	7,8%	850
3	0,2%	0,5%	0,4%	83,0%	0,4%	0,0%	0,0%	0,3%	95
4	2,5%	5,1%	6,4%	5,0%	80,4%	0,1%	5,1%	1,4%	763
5	4,4%	1,1%	4,3%	1,0%	1,8%	84,5%	2,1%	21,5%	2190
6	0,0%	0,2%	0,1%	0,0%	0,5%	0,2%	84,1%	0,1%	175
7	4,2%	4,5%	8,3%	6,0%	6,3%	11,6%	2,1%	65,3%	911
Grand total	519	628	854	100	791	2309	195	708	6104
	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	

Annex 2: Percentage of young people in stable employment (SE), insecure employment (IE) or jobseeking (JS), according to duration in each status, gender and region

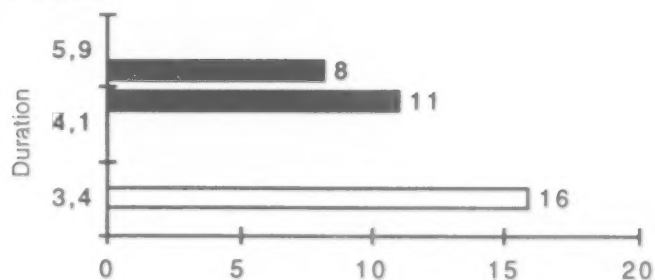
Women Brabant Wallon



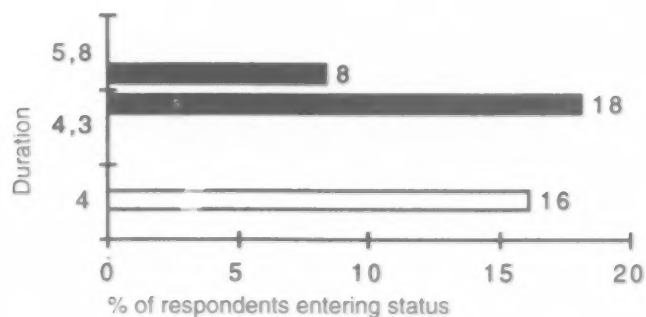
Women Charleroi



Men Brabant Wallon



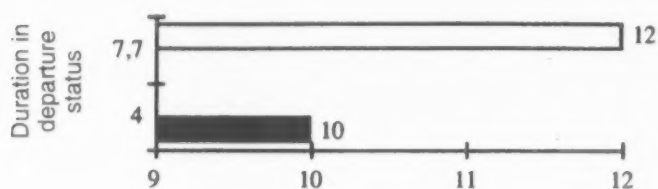
Men Charleroi



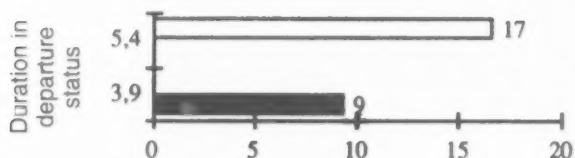
Annex 3: Main changes in status according to departure and arrival status, duration in each status, gender and region

Changes in status following the loss of stable employment

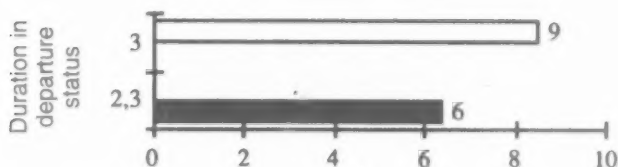
Women Brabant Wallon



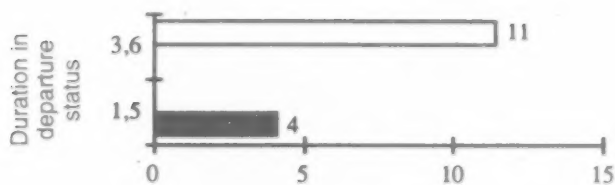
Women Charleroi



Men Brabant Wallon



Men Charleroi

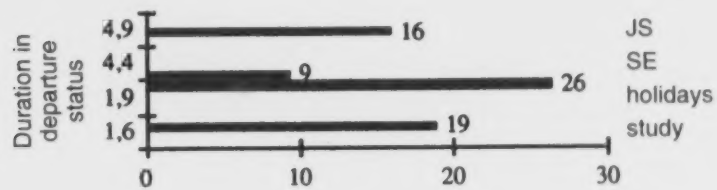


flows towards status (%)

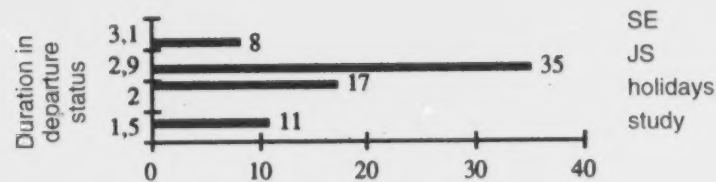


Changes in status following insecure employment

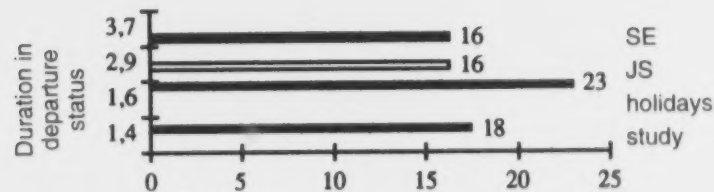
Women Brabant Wallon



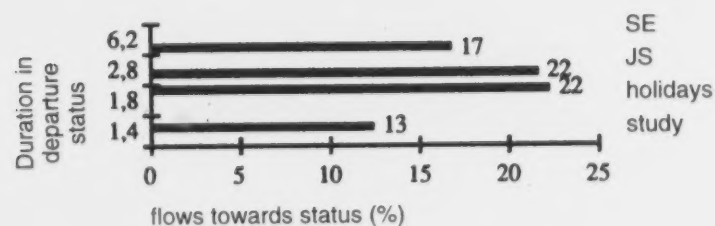
Women Charleroi



Men Brabant Wallon

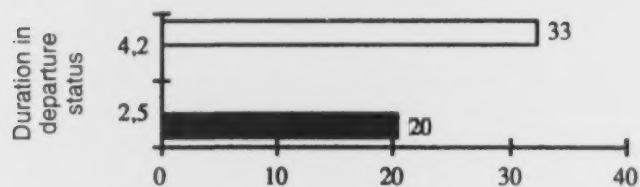


Men Charleroi

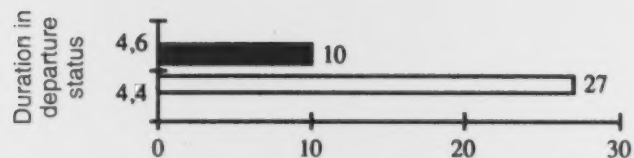


Status following jobseeking

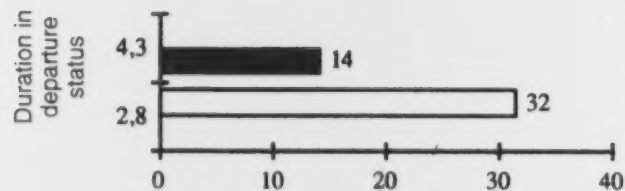
Women Brabant Wallon



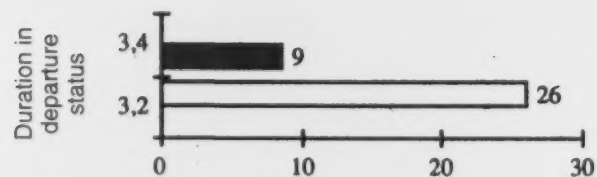
Women Charleroi



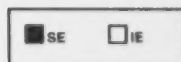
Men Brabant Wallon



Men Charleroi

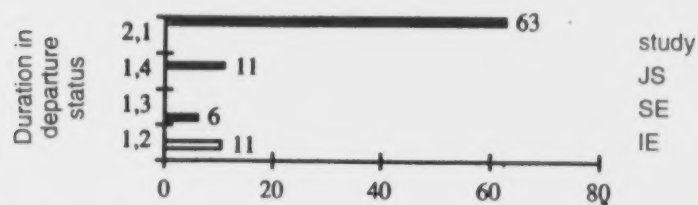


flows towards status (%)

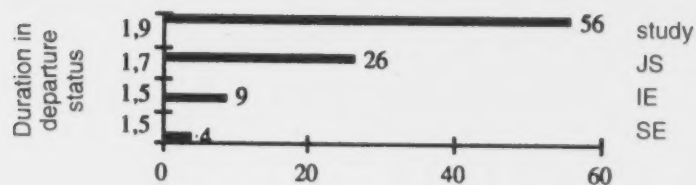


Status after the end of school holidays

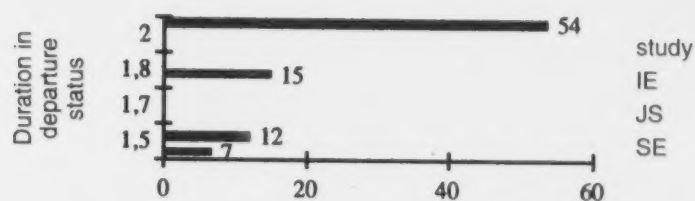
Women Brabant Wallon



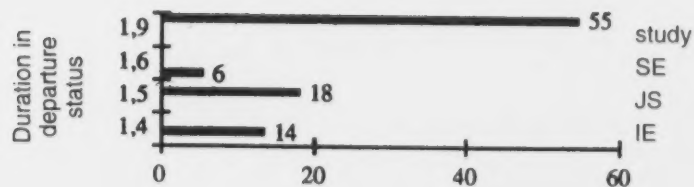
Women Charleroi



Men Brabant Wallon



Men Charleroi

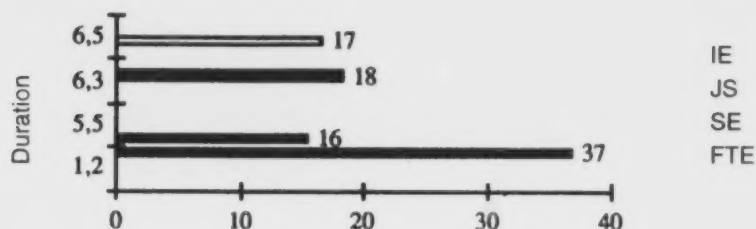


flows towards status (%)

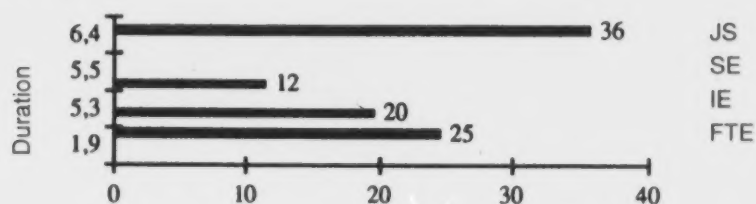


Annex 4: Status at the end of the period according to duration in status, gender and region

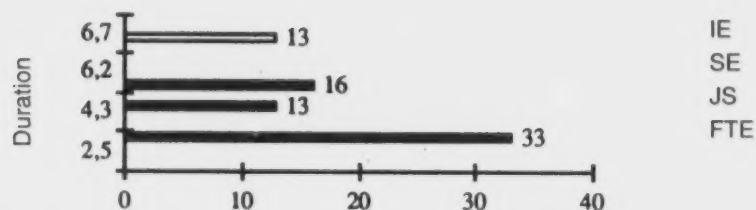
Women Brabant Wallon



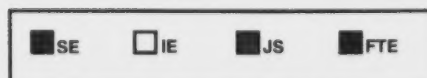
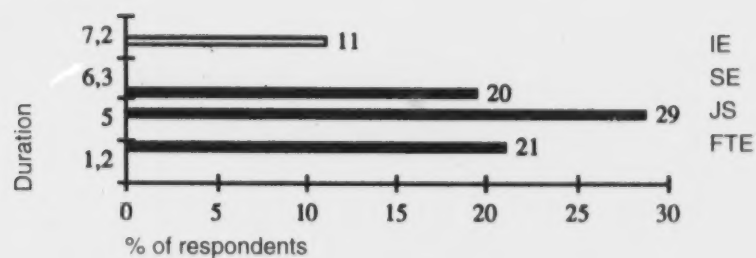
Women Charleroi



Men Brabant Wallon



Men Charleroi



Annex 5: Diagrams showing the most frequent individual routes

The following diagrams consist of three concentric circles. The one in the centre represents *stable employment*. This is followed by *insecure employment*, *unemployment* and (on the outside of the outer circle) the *studies*. The circles are each divided into three segments corresponding to the duration of the individual status occupied.

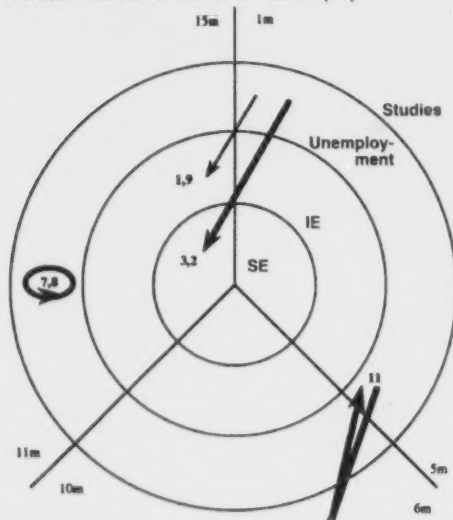
The different routes are represented by the arrows. The blunt end indicates the point of departure and the arrowed end shows the point of arrival. Arrows having more than two segments show that more than two successive statuses were occupied.

A "ringed" arrow indicates routes consisting of a single status throughout.

The figures shown at the points of the arrows show the percentage of those on the labour market who have followed this route.

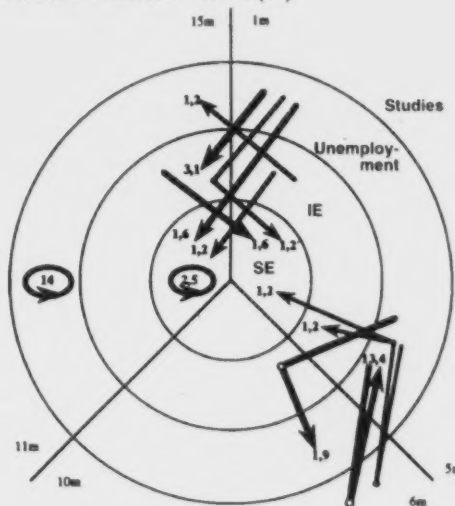
In order not to overburden the diagrams, the routes of those persons who are still in studies, although there are a considerable number, have not been shown.

Routes Brabant Wallon - Men (%)



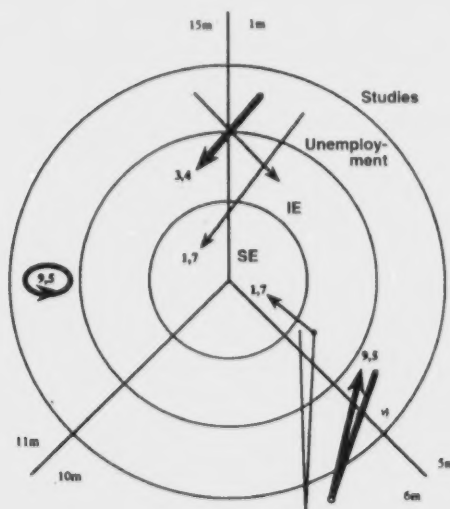
51,3% of routes

Routes Charleroi - Men (%)



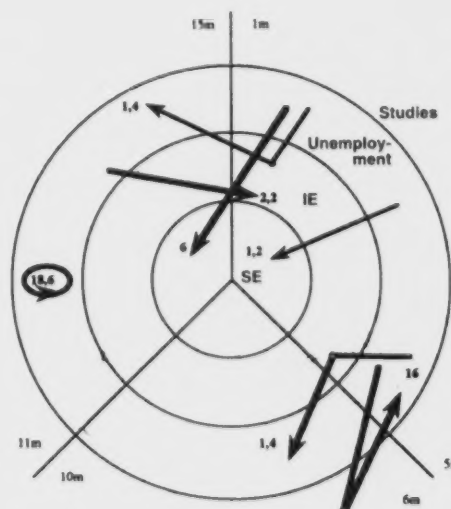
60% of routes

Routes Brabant Wallon - Women (%)



55,3% of routes

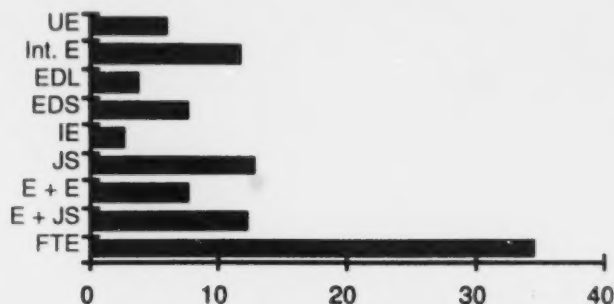
Routes Charleroi - Women (%)



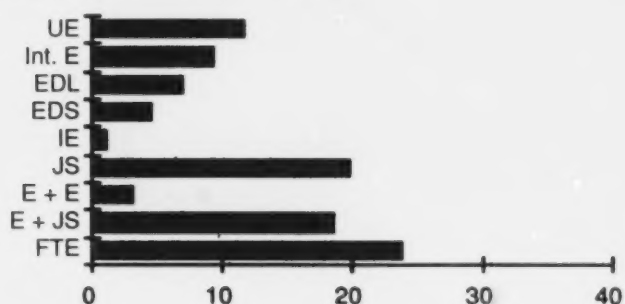
58,8 % of routes

Annex 6: Diagrams showing the classification of routes

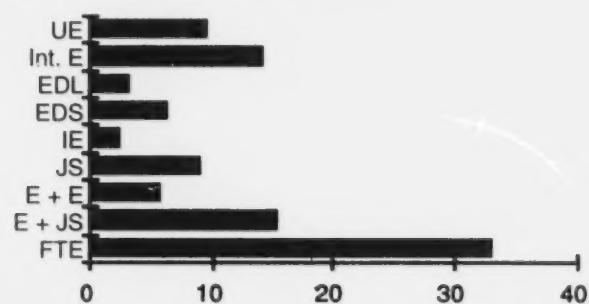
Grouping of routes - Women - Brabant Wallon



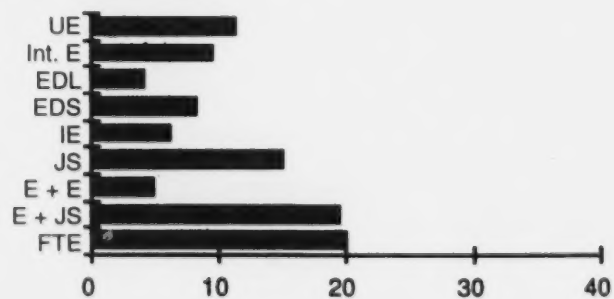
Grouping of routes - Women - Charleroi



Grouping of routes - Men - Brabant Wallon



Grouping of routes - Men - Charleroi



Explaining the differences in the occupational insertion of educationally lesser qualified young people: findings and avenues of research

One of the major transformations affecting occupational insertion processes since the mid-1970s is the prolongation and complexification of the period of transition from education to the labour market (Galland, 1991). These changes impact first and foremost, but not exclusively, on young people leaving the shortest (school-based and vocational) educational streams, confronted with the most serious difficulties in gaining a foothold in the labour market and the most vulnerable to unemployment (Join-Lambert et al., 1993). Indeed, in the case of France, longitudinal surveys describing the conditions and modalities of entry into working life highlight a relatively strong correlation between educational and certificate levels, on the one hand, and the positions held in the labour market several years later, on the other: the higher the level of training, the higher the quality of insertion. The weight of this correlation thus tends to legitimize the variable "school" as a category for the analysis and comparison of characteristics, considered as homogeneous, of the occupational paths of those leaving the various streams of the education system. The extent to which the variable "school" determines the occupational paths of young people nevertheless requires further specification.

A comparison of the occupational futures of cohorts of young people as a function of the training level achieved at the point of exit from the education system shows that the insertion of lesser qualified youngsters is relatively more difficult and mediocre. Can however a homogeneity of social destinies and occupational routes be deduced from the common experience of school failure and orientation towards discredited streams? The numerous French studies on educational under-achievers confronted with occupational and even social insertion difficulties - young people experiencing unemployment (Balazs, 1983), young people confronted with the "galley" (Dubet, 1986), "young people with no future" (Pialoux, 1979), young trainees (Dubar et al., 1987), young people excluded from public training schemes (Lagrée, 1989) - all emphasize the diversity of life conditions, representation systems and strategic orientations of these young people, despite the fact that they are all the products of the same educational streams.

The processing of an occupational itinerary survey conducted by CEREQ in December 1989 among those leaving general or technical secondary education in 1986 (see brief explanation following Table 1) shows that the occupational insertion modalities of low achievers leaving the education system with no certificate tend to be heterogeneous and multifarious: the situations occupied in the course of the 3½ years since the point of exit from the education system are highly contrasted and the statuses held during this period extremely diversified. Although in fact the general trend in the course of the three years is the gradual increase of the proportion of young people in (stable and precarious) employment, the proportion of the unemployed remains virtually stable and even increases towards the end of the period, whereas the proportion of young people registered in different insertion scheme formulae remains high (Table 1).

Table 1: The situations of lesser qualified young people at different dates (%)

	Dec. 1986	Dec. 1987	Dec. 1988	Dec. 1989
Stable employment	7.6	12.6	20.8	27.6
Precarious employment (limited, temporary contract)	10.4	12.9	17.4	18.3
Skilling/adjustment contracts	2.4	2.0	2.7	2.5
Introductory course to working life (SIVP)	4.4	3.8	3.3	1.2
Community work (TUC)	14.0	12.7	7.0	3.6
Training contract	3.3	5.3	4.1	1.8
Training course	11.0	6.3	3.8	3.7
Return to studies	0.2	0.6	0.6	0.5
Unemployment	35.2	30.7	27.2	30.2
Non-working activity	6.1	4.7	5.1	5.6
National service	4.8	8.4	8.1	5.0
Unspecified	0.5	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0

Source: CEREQ

This survey, conducted among a national sample of 11,000 young people, representative of the 300,000 leaving these streams (except apprenticeship) permits the retrospective reconstitution of the first 3¹/₂ years of working life. The complexity of the survey requires direct interviews. The presented data are taken from a specific approach based on the sub-group (120,000 individuals) of so-called "lesser qualified young people", i.e. those leaving school with no certificate (at levels VI, Va and V short-term, without certificate, according to the French nomenclature of training levels).

- Level VI: those leaving the first cycle of the second level (12-14) and one-year pre-vocational programmes (CEP, CPPN, CPA).
- Level Va ("Vbis"): those leaving the fourth class of secondary school and classes of the second short cycle before the final year.
- Level V short-term ("V court"): those leaving the final year of short vocational cycles.

Longitudinal surveys moreover identify contrasting types of itinerary among lesser qualified young people: although some quickly gain access to stable employment despite their lack of educational certificates, others manage to remain occupationally buoyant at the price of high inter-company mobility; some are large-scale consumers of public schemes for the promotion of insertion with an intermediary status between employment and unemployment (post-school training, subsidized employment, etc.), others again experience recurrent or even continuous unemployment (Grelet, Viney, 1991; Zilberman, 1990).

A substantial corpus of empirical findings has thus already been compiled. Research into the occupational insertion of young people nevertheless remains fragmented and has failed to generate a satisfactory and operational theory of insertion (Tanguy (dir.), 1986; Bouffartigue et al, 1989). It should nevertheless be emphasized that one of the most solid conclusions which can be drawn is the high degree of dependence of the "results" of insertion on the social and educational legacies of young people. We shall first of all examine this relationship on the basis of data available on lesser qualified young people.

However more recent studies also show that insertion cannot be considered as a mere match between individuals equipped with (educational and in particular social) "capital" and positions existing ex ante; these studies tend to consider insertion as a social process constructing occupational routes (Paul, 1989) and tie it in with the labour market (Duru-Bellat & Henriot-van Zanten, 1992; Gadrey, 1992). We shall therefore go on to examine this perspective based on the data available on lesser qualified youngsters, before dealing with the methodological conditions necessary to deepen a theory of insertion capable of taking account of the diversity of the occupational itineraries of young people and identifying the social processes constructing these routes.

1. Occupational insertion and previous social and educational routes

In France, the processing of occupational itinerary surveys following the point of exit from the education system take little account of the possible effects of social origin on the "results" and modalities of occupational insertion. This approach is largely explained by the objective of the established survey mechanisms, above all aimed at evaluating public education policies

(Pottier, 1992). For this reason training levels and specialized fields have been given priority as discriminating variables of transitions to the labour market. Social inequality with respect to the education system has nevertheless been a recurrent question of research in the field of educational sociology since the 1970s (Passeron, 1988). Thus, with specific reference to the lesser qualified, we shall examine to what extent insertion is differentiated as a function of social and educational legacies acquired prior to access to the labour market.

The "result" of insertion, defined as the situation occupied by the young person 3½ years following his/her entry into working life, is not independent of social origin. According to the father's occupation, the proportion of the unemployed ranges between 24.8% (children of parents with middle- and higher-level occupations) and 35.9% (children of unskilled workers and domestic staff) (Table 2). The gaps are even wider in the case of access to stable employment: 38.5% and 22.1% respectively. Although the gaps are on average not as wide for situations of unstable employment or participation in a public scheme with employment or training status, it seems that the quality of insertion falls as one moves from the highest position of social origin (middle- and higher-level occupations and the self-employed) to the most undervalued (unskilled workers and domestic staff). The occupational insertion of the children of employees and skilled workers lies in the middle, relatively close to the average.

Table 2: Situations in December 1989 and father's occupation(%).

	Stable employ- ment	Unstable employ- ment	Scheme (job)	Scheme (training)	Un- employ- ment	Others	Total
Agri, craft, comm.	33.5	18.6	5.1	4.7	27.2	10.8	100
Middle and higher level	38.5	17.3	4.2	7.5	24.8	7.8	100
Employees	24.7	21.5	7.4	7.6	28.2	10.8	100
Skilled worker	26.0	18.8	5.7	6.8	31.0	11.7	100
Unskilled worker, service	22.1	16.1	5.9	9.2	35.9	10.6	100
Total	27.6	18.3	5.5	7.3	30.2	11.1	100

Source: CEREQ

"Stable employment":	jobs with an unlimited contract
"Unstable employment":	jobs with a limited or temporary contract
"Scheme (job)":	public measures based on a working contract (skilling, adjustment, training contracts introductory courses to working life, etc.)
"Scheme (training)":	public programmes with trainee status (training course or community work in the non-commercial sector)
"Others":	heterogeneous situations (return to education, non-working activity - for two thirds of those surveyed - national service).

However the influence of social origin is not merely a question of position in the social division of labour; the family situation vis-à-vis working activity must also be taken into consideration. Indeed, the positions held by lesser qualified youngsters are highly differentiated according to the status of the father (Table 3): the relative proportion of the unemployed rises from 25.7% (father in employment) to 43.6% (father deceased); the relative proportion of those with a steady job fluctuates between 17.1% (father not at work) and 30.6% (father at work); and even the proportion of those in unstable employment ranges from 11.2% (father unemployed) to 20.7% (father employed). Young people whose fathers have a job show the best occupational insertion whereas those whose father is unemployed, not at work or absent are in a more difficult situation 3½ years following the point of exit from the education system.

Table 3: Situations in December 1991 and father's status(%).

	Stable employ- ment	Unstable employ- ment	Scheme (job)	Scheme (training)	Un- employ- ment	Others	Total
Employed	30.6	20.7	5.4	6.8	25.7	10.6	100
Unemployed	23.3	11.2	6.2	8.7	41.6	9.0	100
Not at work	17.1	12.9	8.3	7.3	40.1	14.3	100
Retired	23.0	18.2	5.8	7.3	35.1	10.5	100
Deceased	23.5	9.7	4.7	8.3	43.6	10.2	100

Source: CEREQ

If there is a correlation between the previous social itinerary and the "results" of the occupational insertion of lesser qualified youngsters, other characteristics inherited or acquired prior to entry into working life have a direct influence. Thus even among those young people who are the least skilled in terms of initial training, insertion is related to success and the educational curriculum: Table 4 shows this impact of the level of initial training on situations held 3½ years after leaving school: as one moves from the lowest (VI) to the highest level (V short-term),¹ the relative proportions of both stable and unstable employment increase (from 16.6% to 34.5%, and from 13.9% to 23.1%), and unemployment falls (37.2% - 24.3%). Participation in work contract- or training-based public schemes shows the same distribution as unemployment.

Table 4: Situations in December 1989 and educational level(%).

	Stable employ- ment	Unstable employ- ment	Scheme (job)	Scheme (training)	Un- employ- ment	Others	Total
Level VI	16.6	13.9	9.1	9.8	37.2	13.4	100
Level Va	28.7	15.8	5.3	7.3	31.9	11.0	100
Level V short	34.5	23.1	3.3	5.5	24.3	9.6	100
V short tertiary	28.5	22.8	2.6	6.5	31.5	8.1	100
V short industrial	37.8	23.3	3.7	4.8	19.7	10.7	100

Source: CEREQ

Among those leaving level V short-term, industrial specializations lead to better occupational insertion "results" than specialized fields in the tertiary sector. This gap is reflected in the differences established between young men and young women, to the detriment of the latter (Table 5).

Table 5: Situations in December 1989 according to gender(%).

	Stable employ- ment	Unstable employ- ment	Scheme (job)	Scheme (training)	Un- employ- ment	Others	Total
Males	31.5	21.6	6.4	5.4	22.5	11.1	100
Females	23.8	14.9	4.7	9.0	38.0	9.5	100

Source: CEREQ

Thus, even among lesser qualified young people, most of whom come from undervalued educational streams and under-privileged social milieux (38% of the young people's fathers are blue-collared workers and 34.2% are out of work), there is a relationship of dependence between the "results" of insertion and previous social and educational itineraries: youngsters do not all reach the labour market with the same educational and social resources. Access to the various forms of employment and other statuses 3½ years after leaving school are not independent of social origin (position of parents within the social structure and also labour situation), educational course (level and also specialized field of initial training undergone) and gender (girls are generally at a disadvantage).

Although these statistical correlations are not sufficiently strong to infer that being of working class origin and/or coming from a regulatory stream inevitably leads to a social destiny marked by exclusion and persistent unemployment, they nevertheless point to socially determined inequalities with respect to labour market entry. Are these inequalities the prolongation of differentiating mechanisms with respect to education and the social division of labour or the

symptom of other causal chains and social processes? Can it be affirmed that the emergence of insertion as a "social problem" has not profoundly modified the validity of the major explanatory models of educational sociology and social mobility produced just before the crisis, be they the reproductory function of the education system (Bourdieu & Passeron, 1970) or systematic mechanisms of inequality of opportunity (Boudon, 1973)?

In this hypothesis, the contribution of research on the occupational insertion of young people would theoretically be limited by the fact that the object "insertion" in no way constitutes a new or autonomous phenomenon, but simply represents a sub-set or even random social mobility, governed by the same regularities as before. What is at stake is no longer merely nor first and foremost the position within job hierarchy, but the risk of being excluded from employment in the long-term - because the question of the insertion of lesser qualified young people is inseparable from that of the genesis of social exclusion. No research has demonstrated or even affirmed that the same social processes which subjugated working class children to the lowest rungs of the social ladder will inevitably lead them to long-term unemployment and social exclusion. Not only has such an assertion not been established empirically, but research aiming at circumscribing the role of socio-family legacies in insertion processes tend to relate them to other chains of causality with reference to the functional modes of the labour markets in which these lesser qualified youngsters find themselves.

From this perspective, the insertion analysis pattern is no longer merely a "macro" mechanism ensuring a match between the characteristics of individuals and jobs; it attempts to interlink young people's socio-educational legacies with the mechanisms of "wage transaction" (Favereau, 1985). Studies interpreting social origin in terms of youth insertion networks (Marry, 1983), combining occupational insertion and family networks (Dubar, Pottier, 1991) or taking account of recruitment practice, in particular family recommendation (Marry, 1991) go in this direction. They show that the explanation of differences in the insertion of young people from the same educational backgrounds cannot be restricted to consideration of social factors related to initial conditions, attributes acquired before entry into working life, but must place insertion processes at the heart of the labour market.

2. Occupational insertion and initial confrontations with the labour market

However quantitative and standardized surveys among young people leaving the education system, and more globally young people having entered working life, provide little information on the functional mechanisms of the labour markets (Bouder et al, 1993). Monograph- and localized-type surveys are more suggestive at this level (Nicole-Drancourt, 1991). Some studies nevertheless tend to show a correlation between the very first stages of working life and occupational itineraries in the labour market (Grelet et al, 1991) so that emphasis can be laid on the mechanisms of construction of occupational itineraries in the labour market, i.e. in interaction with its structuring and functioning.

A comparison of the situations of lesser qualified young people in December 1986 (six months after leaving school) and December 1989 (see Table 6) inevitably leads to the conclusion that the states at these two points in time are not independent: the probability of holding a given status at the survey date varies as a function of the status obtained upon leaving school.

Table 6: Situations in December 1989 and December 1986 (%).

Dec. 1989 Dec. 1986	Stable employ- ment	Unstable employ- ment	Scheme (job)	Total employ- ment	Scheme (training)	Un- employ- ment	Others	Total
Stable employment	69.7	6.9	1.3	77.9	1.9	11.7	8.5	100
Unstable employment	29.8	32.2	3.4	65.4	3.7	16.6	14.2	100
Scheme (job)	32.8	16.8	13.2	62.8	4.5	18.7	14.0	100
Scheme (job)	22.3	20.1	5.8	48.2	8.8	33.3	9.5	100
Unemployment	19.6	15.9	4.3	39.8	9.8	41.0	9.4	100
Others	29.3	17.7	6.0	53.0	5.2	25.0	16.9	100
Total	27.6	18.3	5.5	51.4	7.3	30.2	11.1	100

Source: CEREQ

Thus a young person who holds a job in December 1986 is more likely to be in employment 3½ years later. However this probability varies as a direct result of the status of employment, the better guarantees being offered, in descending order, by stable employment (77.9% in employment compared to an average of 51.4%), unstable employment (65.4%) and employment in the framework of a public scheme (62.8%). Conversely, a young person who is out of a job in December 1986 is more likely to be on the dole 3½ years later. The weight of the short-term situation is particularly significant for the unemployed (39.8% in employment) and more moderate for those young people who benefited from a training scheme (48.2% in employment). The category "Others" in Table 6 is heterogeneous and combines various phenomena: an above-average number of those young people in national service in December 1986 are employed 3½ years later (66.7%), whereas those who were not working are in the opposite situation (33.8% in employment).

Admittedly, due to a construction effect, there is less of a correlation between the situations in December 1986 and 1989 if more detailed categories than those of employment and non-employment are taken as a basis to record the situations of the young people. Nevertheless a hierarchization of initial situations can be observed as a function of the statuses obtained three years later: the closer the position acquired at an early stage to stable employment (followed, in descending order, by classical employment, public scheme with employment status, public scheme with trainee status, and finally unemployment), the more the distribution of the positions of the young people in this classification will be deformed upwards 3½ years later. It is as if the insertion map were comprised of concentric circles with stable employment in the centre and unemployment (or non-employment) at the periphery and the chances of reaching the central disc were higher the closer the first position is to the centre. The modalities of entry and positioning in the labour market thus press heavily on the "results" of insertion and occupational itineraries.

Table 7: Situation in December 1986 and itinerary indicators(%)

Itinerary indicators	Situation in December 1986						Total
	Stable employment	Unstable employment	Scheme (job)	Scheme (training)	Unemployment	Others	
Total duration of stable employment							
0	0.0	60.5	53.8	66.5	71.3	62.7	60.8
1-6 months	4.2	12.5	12.3	9.9	8.1	8.8	9.2
7-12 months	9.4	8.1	9.3	7.8	7.6	6.3	7.9
12-24 months	12.3	13.7	16.9	12.1	10.2	16.6	12.6
24 months +	74.1	3.2	7.7	3.6	2.8	5.7	9.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total duration of precarious employment							
0	50.1	2.3	0.0	6.6	19.3	24.6	15.4
1-6 months	28.9	5.2	8.5	9.3	18.1	21.3	14.8
7-12 months	9.3	17.3	12.5	17.9	21.4	17.6	17.8
12-24 months	11.6	31.4	31.7	43.6	30.7	27.5	32.3
24 months +	0.2	43.9	48.0	22.5	10.5	9.1	19.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total duration of unemployment							
0	46.2	27.6	31.7	10.3	0.0	25.2	15.2
1-6 months	34.3	31.9	28.5	27.3	6.1	29.4	21.3
7-12 months	6.7	17.6	16.7	21.9	16.6	24.3	18.2
12-24 months	11.1	18.3	17.4	32.6	38.3	14.8	27.9
24 months +	1.8	4.6	5.6	7.9	39.0	6.3	17.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: CEREQ

The itinerary indicators measure the total length of time spent in the state in question (stable/precarious employment, unemployment) in the course of the 3½ first years of working life.

Table 7 gives another example of this phenomenon; it demonstrates the existence of a correlation between positions held several months following the point of exit from the education system and itineraries viewed from the angle of a number of indicators of duration. At one extreme, finding stable employment quickly affords effective protection against unemployment (80.5% of the young people in question experience less than six months of unemployment, compared to an average of 36.5%) and even against precariousness of employment (79% remained in precarious employment no longer than six months, compared to an average of 30.2%). At the opposite extreme, being on the dole in December 1986 exposes the youngsters in question to protracted periods of unemployment (77.3% were out of work for more than one year, of which 39% more than two years, compared to averages of 45.5% and 17.6% respectively) and constitutes a barrier to the accumulation of long-term job experience, even in the form of precarious employment (9.1% in precarious employment for more than two years and 19.3% have never been in this type of employment, compared to 19.7% and 15.4% on average). The young people who found a place in a public scheme at an early stage find themselves in situations relatively close to this second pole in December 1989: even if they have had less experience of unemployment lasting more than two years (7.9% compared to an average of 17.6%), relatively few gain access to stable employment (66.5% have never been in stable employment, compared to 60.8% on average) and have above all been in precarious employment (for over one year in 66.1% of cases compared to 52% on average). The young people who found unstable employment or a job within the framework of a public scheme in 1986 are characterized by an itinerary contrasted to that of their unemployed counterparts and at the same time very different from that of those who found stable employment at an early stage. Their path is in fact characterized on the one hand by relatively short periods of unemployment (over 75% have experienced less than twelve months of unemployment and almost 60% less than six months, compared to 54.7% and 36.5% on average) and by the weight of precarious employment as opposed to stable employment on the other (43.9% - 48% have spent more than 2½ years in precarious employment, whereas only 5.2% - 7.7% have spent the same time in stable employment).

Although the dependence between the "results" of insertion and the first phase of construction of the occupational paths (the "first steps" on the labour market) would appear to be established, the theoretical status of this statement, and therefore its position in an explanatory theory of the differentiations of insertion, as yet remains uncertain. Are these correlations a reflection of the more or less autonomous effect of mechanisms of selectivity inherent to the youth labour market? The study of the functional modes of this market is not yet sufficiently advanced to be able to give a definitive answer to this question, especially as this market is extremely fragmented, notably due to the multiplication of virtual statuses of employment and activity (employment on the basis of an unlimited/limited contract, temporary staff, skilling/apprenticeship/adjustment training contract, various schemes/activities - with or without a contract of employment - in the non-commercial sector, etc.) and the great diversity of labour market players (employers, tutors, trainers, psychologists, guidance, evaluation, etc. practitioners).

A further question equally determinant for an understanding of the processes of construction of insertion concerns the interactions of these experiences in the labour market with previous socio-educational legacies and achievements and primary socialization. With respect to those lesser qualified young people who have undergone no vocational training (or have not succeeded in acquiring a recognized and validated vocational qualification within the education system) and have been oriented on the basis of their negative school careers, the hypothesis can be advanced that a decisive test in the process of occupational insertion lies in the initial confrontations with the labour market and the learning of its functional rules. In fact, in contrast to those leaving with a certificate of exploitable value in the labour market, at least in the long-term, the vast majority of lesser qualified young people cannot find direct insertion into employment on the basis of the resources supplied by their education or social milieu of origin. To gain insertion into the labour market they have to develop new practices with respect to learning, job search and the construction of an occupational project; they have to establish relations with company players or insertion promotion schemes, have their skills recognized and express demands. These practices constitute a "secondary" socialization process (Berger & Luckmann, 1986) which differs from primary socialization constructed in the social milieu of origin and school-based experience.

Conclusions

Therefore, although longitudinal and standardized surveys among young people entering working life have led to significant progress in the description of insertion modalities (Demazière, 1993), they nevertheless remain inadequate for the construction of a theory explaining the diversification mechanisms in the field of insertion processes. The elaboration of such a theory presupposes the application of complex methodological mechanisms so that at both empirical and theoretical levels occupational insertion can be recorded as a process which is both biographical and structural, produced by relatively similar social and educational conditions and generating considerable differentiations and contrasted individual histories. Research currently under way on lesser qualified young people (Demazière, Dubar (eds.), 1993) aims at the operationalization of this question by confronting heterogeneous approaches: an indispensable description of the paths of young people in the labour market, observation of the processes at work in this market, the categorization and mobilization practices of insertion players and an analysis of the transactions young people enter into with others and the strategies they construct in these interactions. The methodological dimensions of these orientations are determinant since they imply linking up questionnaire-based surveys among young people (along the lines of current longitudinal statistical surveys), surveys among institutional and company player networks (carried out to a limited extent by certain evaluations of public policies to promote insertion) and explorations on the basis of non-directive interviews into how young people experience the period of entry into working life and construct their insertion projects. With this condition, the objective structure of insertion paths could be more effectively linked up with the players and mechanisms characterizing the labour and insertion markets within which these paths take their course, as well as with the strategic logics of young people and how they reconstruct their primary socialization (school, family) and from this their secondary socialization (vocational training, employment).

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Note

¹ See comments following Table 1 for a brief explanation of the French training nomenclature.

The transition to the labour market of vocational and technical secondary school leavers: duration of transition, nature of employment contracts and job-relevance of educational qualifications

Introduction

Since 1985 I have been involved in several studies of young people's transition to employment from vocational and technical secondary education (Denys 1986, Denys 1988, Denys 1989, Denys 1990, Denys 1991, Denys 1993). This made it difficult to pick a single theme to serve as the subject of a paper for the first conference of the European Network on Young People's Transition from Education to the Labour Market. Eventually, rather than deal in depth with just one theme, I decided to touch on several; this is presumably in keeping with the requirements of the first conference, whose main purpose is to look at what is being done in the various countries by way of research into the transition from education to employment. In this paper I look at three themes.

The first is that of the period of unemployment between leaving school and finding work; such post-school unemployment is interpreted in different ways by different theories. Then I consider the nature of young people's contracts of employment, focusing particularly on the role of temporary and/or part-time contracts; such contracts are presumably common in most European countries among young people in their first job, but how are we to interpret this? Do such contracts herald a lifetime of temporary and/or part-time working or are they a purely transitional phenomenon? Our third theme is that of the match or mismatch between educational qualifications and job requirements: according to some commentators more and more young people are doing jobs for which their education has not prepared them in any way (i.e. study choices are less and less likely to entail occupational choices), but my studies cast considerable doubt on this assertion.

Most of my studies relate to young people leaving vocational and technical secondary schools and the results cannot simply be generalised. (A brief account of the Flemish education system is given in the appendix.)

1. Post-school unemployment: an indicator of what is to come?

Entry to the labour market is the start of a new chapter in a young person's life; moreover in many cases the transition from education to the world of work is a period of instability, which may be due to the job-seeking behaviour of the young person concerned, to employers' attitudes towards young workers, to government policies in this area. Military service and marriage (or the start of living together), events which often coincide with the transition from school to work, can also contribute to instability.

The analysis and interpretation of the transition is no easy matter.

In Flanders youngsters leave school at the end of June or the beginning of July: in previous years this has been the start of the long summer holiday, but now they must find themselves a job. Some youngsters get work immediately, whether for themselves or through contacts; others start looking straight away but are not immediately successful (the search is made more difficult by the fact that many firms and institutions themselves take time off in July and August); yet others prefer to start with a holiday, taking no active steps (and perhaps doing nothing at all) to get a job for a few months. The distinction between being unemployed and being on holiday is not always clear for the first two months, and experience showed little consistency in the ways young people occupied and regarded this time: those who started work in September were more likely to see the months of July and August as a holiday than were those who remained jobless until December. Even so, the September starters must have engaged in some kind of job-seeking, since otherwise they would not have obtained work. The simplest solution for research purposes is to regard July and August as a holiday, so that any young person finding work before 31 August is deemed to have experienced post-school unemployment of zero duration. Studies show that, on average, youngsters leaving technical secondary education find work fastest (see table 1).

Table 1. Average post-school unemployment (in months) among boys and girls leaving vocational and technical secondary education (District of Leuven, 1988)

	Technical secondary education	Vocational secondary education
Boys	1.06 (N=104)	1.54 (N=118)
Girls	3.65 (N= 94)	3.38 (N=165)

How is post-school unemployment to be understood? Some youngsters may get a job more or less immediately but be unemployed in a few months' time, while others take their time, eventually find work and proceed to build a stable career. There are various theories as to the role of post-school unemployment.

Research in this country and abroad has repeatedly found an inverse correlation: as the period of unemployment lengthens so the chances of finding work without help diminish (Desmedt 1986, Have 1985). There are various explanations. The "human capital" theory points to the deskilling effect of unemployment, making the individual less attractive to employers; others stress the stigmatising effect of being without work. The "queue theory" imagines a line of potential employees whose order is set by employers on the basis of such characteristics as qualifications, sex, race, age and the like; those at the head of the queue are the first to get work; those at the back are not only the last to be taken on, they are also the first to be laid off if should the economy weaken (the "last in, first out" principle). According to these theories, the shorter the period of post-school unemployment, the better.

Certain job-search theories suggest something different: youngsters who find work quickly may have been too easily satisfied and in the long run may be worse off than those who do not seize the first opportunity but go on looking until they have found a suitable and stable job.

In reality both phenomena occur. This explains why in his study the Dutch researcher Groot advises young people to continue looking long enough to find a suitable job - but not so long that the adverse effects of unemployment begin to predominate (Groot 1990).

The studies in which I have been involved unearthed several indications that post-school unemployment is a good indicator of long-term career prospects: broadly speaking, those who find work relatively quickly also tend to do better later on.

The duration of post-school unemployment correlates with individuals' employment position almost three years on: those covered by the study who were out of work almost three years after leaving school had on average had a longer period of post-school unemployment than those who were in work at that point. Closer analysis reveals that the difference is entirely on the girls' side: even discounting those who have never worked (and thus push up the average duration of post-school unemployment), girls who are without work after almost three years on the labour market took considerably longer finding their first job than those now in work (4.6 as against 2.7 months).

On the basis of these figures we can cautiously conclude that among girls the duration of post-school unemployment is a pointer to their later prospects. The explanation for this is less clear. There are indications of a selection process in the post-school period, i.e. there is indeed a kind of "queue" headed by the "strong" candidates for employment, with "weak" candidates bringing up the rear: on average, youngsters who have had to repeat years of their school courses take longer to find their first job. The effect of this selection is probably amplified by deskilling (due to lack of work) and stigmatization (due to the negative image of the unemployed). Phenomena of this sort are hard to measure, however, making it difficult to determine how big a part they play.

Given that there are also "strong" and "weak" candidates for employment among the boys, why should only the girls be affected in this way? First, boys have to do military service, which incontrovertibly has an effect on their job-search behaviour and type of employment contract. More important, however, is the state of the labour market in the technical-craft occupations which boys leaving vocational and technical secondary education tend to enter. Until recently the demand for people to do such jobs was heavy, to the point that many vacancies were left unfilled. This meant that while the "weaker" candidates might take longer to find work and have to be satisfied with a less favourable contract, they too would eventually make their way on the labour market. The "queue" is thus concealed by the employment boom, and where demand for workers in technical-craft occupations falls away we can expect the same phenomenon to appear among boys as among girls, if to a lesser extent. Given 1993's recessionary conditions, with post-school unemployment among boys now lasting considerably longer than four years ago, we shall soon be able to test this hypothesis.

Returning to the basic question of whether the length of post-school unemployment is a good indicator of later career prospects, I am inclined to answer in the affirmative, at least as regards girls in this research population.

2. Precarious contract, precarious career?

Every study of working lifetimes focuses considerable attention on types of employment contract, with researchers tending to take the full-time permanent contract as the standard; all other contracts are thus non-standard or, more vividly, "precarious" (van Hootegem 1991). There are objections to this kind of approach. While research has shown clearly enough that explanations for the occurrence of part-time and/or temporary contracts are to be sought in the first instance on the demand side of the labour market, this does not mean that supply-side factors are not also involved.

A more important objection is that such an approach is somewhat static, focusing overmuch on the contract itself. The studies with which I have been involved clearly show that the nature of employment contracts depends very much on when observations are made: temporary and/or part-time contracts are common at the start of youngsters' working lives, within only one in four (boys as well as girls) having full-time permanent contracts after ten months. After 34 months the situation has changed radically: among boys the proportion with full-time permanent contracts has risen to 78 per cent, among girls to only 48 per cent. Comparing the position after ten and 34 months, we find that at the later time around 80 per cent of boys have full-time permanent contracts whatever kind of contract they had after ten months. For most boys a non-standard contract is thus a temporary phenomenon, common only at the very beginning of their working lives. A precarious contract thus does not necessarily herald a precarious career.

Among girls the position was quite different, the proportion of non-standard - precarious - contracts remaining considerable: only among those who already had full-time permanent contracts after ten months were a large majority found to have such contracts after 34 months. In other cases the proportion was much lower: e.g. among those who had a part-time contract (temporary or permanent) after ten months, only 40 per cent had a full-time permanent contract after 34.

What we have called precarious contracts thus herald precarious careers more often among girls than among boys. My view is that contracts are best interpreted in relation to career phases: a temporary or part-time contract comes to mean something different as an individual's career progresses. Moreover there are significance differences between the experiences of men and women.

It must be reiterated that these figures relate to a boom period on the labour market: it is by no means certain that the same smooth progression to full-time permanent contracts would be observed in more recessionary times.

4. Choice of study, choice of career?

While numerous commentators seem persuaded that more and more young people are in jobs which have little or nothing in common with the studies they have followed (Desmet 1993), it is not clear what their evidence is: I am not aware of any data to support this position, and indeed the studies with which I have been involved seem to point the other way. For a majority of young people study choices remain closely bound up with career choices; where young people take jobs for which their schooling has not prepared them, in many cases this simply reflects deficient demand for workers with their particular qualifications. Most youngsters seek work which more or less matches their qualifications; only if they fail to find it do they look elsewhere. The "matching rate" - the proportion of young people at any given time doing work whose requirements match their qualifications - can thus be seen as a good indicator of the labour-market position of each type of qualification. This applies particularly to youngsters completing vocational or technical secondary education; while it is unlikely to be straightforwardly true of university graduates, here too there are indications that study choices and career choices are linked, at least in some areas.

Data from various studies underpin these conclusions. The main results are given in table 2.

Table 2. Matching rate (%) among workers with technical and vocational secondary qualifications

	Technical 1989	Vocational 1993
Technical secondary qualifications		
Men	79	48
Women	39	65
Vocational secondary qualifications		
Men	81	62
Women	59	62

In 1989 around four out of every five male school-leavers found a job which more or less matched their school qualifications. Most of them had taken courses with a technical-craft bias (metalwork, woodwork, technical installations etc.). 1989 was a boom year, with many unfilled vacancies at the public jobcentres for people with such qualifications; indeed, the market was so tight that employers were contacting vocational and technical schools in their areas offering contracts to final-year pupils. One in five male school-leavers found work through their school, making schools a more significant allocation channel than the public employment service (which found work for only nine per cent of leavers).

Female school-leavers were much less likely to find work which matched their qualifications. As in other EC countries, most vocational and technical courses have a strong sexual bias: courses leading to technical-craft qualifications are almost exclusively taken by boys while girls typically follow courses focusing on clothing, personal care, paramedical care and clerical work. With few exceptions, holders of qualifications in the latter group are in a fairly weak position on the labour market.

As table 2 shows, this weak position is reflected not only in higher unemployment but also in lower matching rates; in most cases the non-matched jobs are ones requiring few qualifications (cashiers, cleaners, assembly-line workers, etc.).

The current position is very different: the matching rate has fallen sharply among men while the rate among women who have followed vocational secondary courses has remained broadly constant (the higher matching rate among women with technical secondary qualifications is due to specific factors with which I shall not deal here).

The reason for the falling matching rate among men is not hard to find. Recession in manufacturing has sharply worsened the employment position of holders of technical-craft qualifications, producing not only greater unemployment (the lengthening of post-school unemployment has already been mentioned) but also a lower matching rate. My most recent study specifically asked why respondents were doing jobs which did not match their qualifications: most of the youngsters concerned indicated that they had been unable to find work offering a better match and had had to be satisfied (at least for the moment) with jobs to which their qualifications were not relevant. To complete the picture it must be added that almost 20 per cent indicated they had refused a job which matched their qualifications because it did not attract them. The reasons for this vary. Pay, terms of employment and working conditions may be unappealing, for example; this reason is cited notably by holders of paramedical qualifications, some of whom are put off by the irregular working hours and low pay.

Summing up, it would be premature to assert that more and more young people are deliberately taking jobs to which the courses they have followed are irrelevant. Our figures show that the great majority of school-leavers look for work whose requirements match their qualifications, and where this is not the case the choice is generally negative. At least where our target group is concerned (holders of vocational and technical secondary qualifications) study and career choices still go hand in hand; other studies indicate that in some disciplines at least this observation is also true of university graduates. De Witte has shown, for example, that two out of three psychology graduates take jobs to which their qualification is relevant.

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Appendix

The Flemish education system is structured as follows:

- nursery education (to age 6);
- primary education (6-12);
- secondary education (12-18), which exists in four forms:
 - general secondary education (ASO),
 - technical secondary education (TSO),
 - vocational secondary education (BSO),
 - arts secondary education (KSO);
- higher education (from age 18).

General secondary education prepares pupils for higher-level studies. Youngsters wishing to follow vocational courses enter vocational or technical secondary education. Vocational secondary courses are geared to occupational competence, emphasising practical aspects of work. Technical secondary education, while also practically oriented, encompasses a range of theoretical and general subjects; its graduates often go on to further study. In Belgium most youngsters acquiring a basic vocational qualification do so on full-time school-based courses, but part-time options also exist which provide a direct preparation for employment (experimental part-time education, the business training scheme and off-the-job industrial training). The business training scheme does not form part of the education system; it has long provided courses geared to the needs of the small and medium enterprise sector. During their off-the-job training youngsters can follow a course leading to a basic vocational qualification; to this end they enter into a contract with their employer and attend courses at the SME sector's own colleges.

Complex training routes and the results of insertion among young people

The theory and methodology underlying this paper reflect the research on training routes and young people's occupational and social insertion carried out by the Education and Work Research Group (GRET) within the Institute of Educational Science of the Autonomous University of Barcelona.

The data and the specific analyses presented in this paper are based on a retrospective longitudinal survey carried out among a representative sample of 31-year-olds in the metropolitan area of Barcelona including variables with reference to (formal, non-formal and informal) training routes, occupational routes and family routes (family of origin and own family).

1. Complex training routes

To identify young people's training processes with their academic certificates is a simplification which barely corresponds to the reality of the initial youth training processes; there are significant differences between training routes and educational routes and between training routes and academic certificates.

The complexity of youth training routes stems from two types of change which are intimately interrelated: socio-economic changes and their impact on the content and character of skills in demand on the labour market and changes in young people's training behaviour.

1.1 Economic, social, technical and organizational changes in the production processes of goods and services and their effects on the redefinition of skilling demands have also triggered changes in training processes and scenarios.

1.2 The initial training of young people is currently the result of highly diversified combinations, a very rich and highly diversified set of training opportunities and resources.

The individual and collective training careers of young people are structured on the basis of available provision into routes which can only be expressed in terms of models if we open up both theoretically and methodologically to new options going beyond the logics pre-determined by training institutions (Planas 1991).

Complex training routes are the result of the extension of "training provision" and the scenarios in which it is developed, on the one hand, and of young people's use of training provision in the construction of their initial training, on the other.

The term "use" has a double meaning or value in this context, implying not only the behaviour or habits of young people in the construction of their training routes, but also the changes effected by young people in the form or purpose of the training provision available in the process of the construction of their training routes, giving them a significance going beyond the sum total of the separate components.

The "global training system", referred to by a desirable model for the future organization of training processes increasing in complexity every day, is already being applied in practice by a considerable number of young people in their training routes. Analysis of young people's behaviour proves a privileged observatory for an understanding of the structuring processes of a future "global training system".

2. The point of insertion and insertion routes

To analyse insertion routes, a final point must be determined and, to analyse the results of insertion, it shall be necessary to establish evaluation criteria corresponding to its social and individual objectives.

2.1 The concept of socio-occupational insertion

When approaching the subject of socio-occupational insertion from the angle of the theoretical framework of transition and understanding this "transition from education to the labour market" as a route whose analysis requires longitudinal methodologies, occupational or socio-occupational insertion cannot be identified as a given point in time, but as a phase within the path of transition. The disadvantage of this approach, which is both theoretical and methodological, is the risk of obscuring situations of change within the transition process and situations offering a perspective in the training, occupational and social lives of young people which do not actually mark a final situation.

The time limits of the transition process must be strictly defined; this not only ensures against indefinite prolongation, but also serves as a dividing line between initial and continuing training, given that within the logic of transition, it can only be a question of socio-occupational insertion.

The definition of occupational insertion in the theoretical framework of transition is a subject which has been repeatedly tackled by researchers. The first definition which specified "what constitutes insertion?" and "from what point onwards is one inserted?" was the definition within the framework of the extensive longitudinal research in France which, according to J. Vincens' summary (1986, p.65), defines the "insertion occupation" as "that which permits the individual to cease job search". According to this definition, an individual has accomplished occupational insertion when: a) he/she has a steady job and according to his/her information, will not have to change jobs in the near future; b) does not voluntarily wish to change his/her employment; c) does not devote his/her time to seeking other employment or to studies leading to a change of job.

Although this definition is a good starting point, its principal limitation is that it only applies to "good insertions into employment" and excludes both "bad insertions" and insertions into non-working activity (e.g. housewives) which, as shown by the results of our studies (Casal, Masjuan, Planas, 1991 and Planas, Casal, Brullet, Masjuan, 1991), remain forms of insertion, which although not mass phenomena, are nevertheless clearly present in our society.

It is therefore more appropriate, in terms of both the objective of our research and the available data, to define the occupational insertion of a young person as follows: "a person has reached socio-occupational insertion and completed his/her initial training when his/her labour path redefines or repositions him/her occupationally with respect to his/her initial training". In this definition, "labour path" refers not only to actual working situations and routes, but also to situations of unemployment and non-working activity which also have an occupationally redefining and repositioning function, although in the negative sense.

2.2 The operative translation of the concept of socio-occupational insertion

The most appropriate translation, in statistically operative terms, of the concept of socio-occupational insertion indicated in the previous paragraph on the basis of the data available in our surveys is as follows: the age of socio-occupational insertion is considered as the **commencement of a period of three consecutive years** (only "military service" being regarded as an interruption which does not break the continuity) **in the same labour situation without participation in regulated** (educational) **studies**. It being understood that both non-working activity and unemployment are "labour situations", three consecutive years in either of these conditions therefore also defines socio-occupational insertion, although in the negative sense.

The three-year period is clearly a convention based on the fact that according to the research conducted by GRET on the insertion of university graduates (Masjuan, Vivas, Zaldivar 1990 and 1992), a considerable majority consider that their professionalism has been redefined or considerably marked by their labour experience three years following completion of their studies. If this applies to those who have completed long-term educational studies, it will be even more evident among other certificate holders.

For this reason we consider a period of three consecutive years in the same labour activity (or inactivity) without participation in studies as sufficient for the definition of the socio-occupational insertion of individuals.

With the application of this operative definition of the point of insertion, the surveyed group is divided into quartiles as follows:

Quartile no. 1:	age of insertion 14-15.
Quartile no. 2:	age of insertion 16-18.
Quartile no. 3:	age of insertion 19-22.
Quartile no. 4:	age of insertion 22+.

In terms of gender, women are overrepresented in quartiles 1 and 2 and men in quartiles 3 and 4.

2.3 Results of insertion

A point of theoretical obscurity which persists in analyses on the socio-occupational insertion of young people is the evaluation of the results of occupational insertion, i.e. what constitutes good occupational insertion?

The welter of objectives and factors of a subjective, economic, political, cultural and ideological nature which necessarily intervene in this definition, both from the point of view of young people, researchers and the users of research results, make it virtually impossible to reach a consensus on this subject and draw up a **single** definition of "good insertion".

One of the risks posed by the analysis of the results of insertion is substitution of the multiple strategies of the various groups of young people by their interpretation on the basis of preconceived models whose rationality may be totally alien to the objectives of the young people themselves.

For this reason it would seem to be more accurate to opt for a more eclectic approach so that the results of insertion can be "measured" by defining a series of indicators and subsequently interpreted from different angles.

Finally, the indicators used in the research offer the best insight into three aspects:

- a) occupational activity at the time of the interview (age 31 in our case),
- b) labour path,
- c) subjective perception of success or failure.

3. The construction of complex training routes

3.1 Training components and how they interrelate

According to a model developed in previous studies and reports (Planas, 1992 and 1993), the components of complex training routes are as follows:

- a) school-based training (including both final cycles leading to a certificate and those which do not lead to a certificate and educational routes),
- b) schemes,
- c) work experience during studies and
- d) experiences with a particular training value: "significant life experience" (in associations, etc.).

According to our research findings, the relationship between the different training components in the construction of the routes does not respond to a logic of substitution according to which the various components are substitutes and presented as alternatives (e.g. work experience during studies and schemes substituting school-based training deficits), but that the principal or dominant type of relationship is that of **complementarity**. In other words, the various training components tend to concentrate, training those who are already trained and tending to exclude the untrained, a trend which as recent research has shown (Garcia, Artiles, Planas 1993), tends to be reinforced by firms in in-company training.

3.2 The construction of complex training routes

Complex training route models have been established on the basis of the technique of internal automatic classification by multiple correspondence to each quartile of insertion to guarantee a minimum of homogeneity in the age of insertion.

The variables related to the training components indicated in the previous paragraph were used as active variables for classification purposes.

The result of this classification are the complex training route models indicated in the first column of table no. 1.

4. The results of insertion according to routes

The variables considered to "measure" the results of insertion, according to the aspects indicated in par. 2.3, are as follows:

- a) Vocational activity at the age of 31: level of activity, occupational category, income level and type of activity;
- b) Labour path: situation of insertion, labour path, clarity of occupational objectives, coherence between objectives and studies completed;
- c) Subjective perception of success: success achieved with respect to work stability, remuneration, quality of work and training for the occupation. Would he/she act differently if he/she could with respect to: further, better, different studies or looking for another job?

The results of insertion according to the different models of complex training routes are shown in table no. 1.

5. Conclusions

The main conclusions which can be drawn from the results of our survey are as follows:

5.1 Diversity in terms of the age of insertion

The wide range of ages in which the socio-occupational insertion of the same age group takes place has important implications for the very concept of youth. One of the direct implications of this fact is the need to redefine the limits between initial training and continuing training, avoiding bureaucratic and administrative logics which fix the dividing line in terms of age or educational cycles.

5.2 Extension and growth of training routes

The expansion of educational training has been accompanied by a generalized growth of other training components. As a result, there are significant distances between training routes and educational routes and between the latter and academic certificates. Analysis of the behaviour of young people is a privileged observatory for an understanding of the structuring processes of a hypothetical "global training system".

5.3 The new role of the school

The available data point to the **central role of the school and its levels and certificates** in the construction of complex training routes. In the wider framework of complex training routes constructed on the basis of various types of training (formal, non-formal and informal), school-based training acquires a new role, perhaps less important in quantitative, but more important in qualitative terms.

The school is called upon to play a central role in the regulation of wider training processes, providing the "self-management capacity of the actual training processes" on the part of young people as a key element of the structuring of "complex training routes" in a more democratic way than families.

5.4 Students are agents and not merely players

The relationship between the various components within the training routes of young people is characterized by not following a fixed model or a model predetermined in its time sequence or combination.

In their use of available provision, young people often change both the forms and the substance and purpose of the various training programmes. These changes have a greater impact on training provision which, like school-based training, is more formalized and has more clearly defined objectives.

The role of the student is not clearly defined in terms of his/her role as a player, both in the task of the construction of "complex training routes" carried out by young people in their initial training and in terms of the formal and substantial changes they produce in their use of the various types of training provision.

5.5 Training routes and the results of insertion: a double concordant dualization

On the basis of the available data we can refer to a process of dualization which tends to polarize training routes on the basis of initial training (complex training routes) and continues in continuing training (Garcia, Artiles, Planas, 1993).

This dualization in training routes corresponds to the dualization in occupational insertion, establishing a **double concordant dualization** between both which, reasonably, will tend to deepen later due to:

- a) the training policies of the firms principally geared towards those with most training,
- b) trends at the level of the users of public occupational training policies, tending to shift towards secondary and higher levels of certificates and
- c) the actual training or non-training character of the work of the various protagonists.

We refer to concordance, as opposed to correspondence, because this is a summative phenomenon based on two autonomous dynamics, neither of which induces the other, which is not functional for the medium- and long-term needs of the labour market and which should raise the question of who trains or retrain the "non-trained" resulting from the aforementioned double dualization.

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Table 1: Situation Age 31				Route					Subjective appraisal						
Category + route descriptor % total	Level of activity	Occ. cat.	Type of work	Income level	Insertion situation	Work route	What he/she wanted to be	Coherence between studies/wishes	Stability	Remuneration	Quality of work	Vocational training	Study more + better	Study something else	Would seek different job/occupation
A1(10.3 n=15) % = 2.5	- full time	GP-3	- production technician	- low - middle	- odd jobs - full-time	- upward	- always the same	- inadequate	- successful (slightly)	- not very well - not objective	- successful	- successful	- yes	- yes	- yes
A2(72.4 n=105) % = 17.4	- non-employed	GP-4	- production auxiliaries	- middle/low	- non-empl./housewife	- no change - long-term unemployment	- no info.	- inadequate	- not very well - not objective	- not very well - failure - not objective	- not objective - not very well	- little success - not objective	= X	- yes	- yes
A3(8.3 n=12) % = 2.0	- part-time	GP-3 GP-4	- admin. - production - auxiliary	- low - middle/low - middle	- half-time	- long-term unemployment - complex route	- no info.	- inadequate	- failure - bad	- not very well	- not objective	- failure - bad	- yes	- yes	- yes
B1(52.4 n=78) % = 12.9	- non-employed - irregular employment	GP-3 GP-4	- production	- middle/low	- housewife - unemployed - half-time	- no change	- no info.	- inadequate	- failure - bad	- bad - not objective	- not objective	- failure - bad	- yes	- yes	- yes
B2(12.5 n=18) % = 3.0	- full-time	GP-3 GP-4	- admin.	- low	- full-time	- no change - complex route	- no info.	?	- failure - successful	- bad	- failure	- bad	- yes	- yes	- yes
B3(25.7 n=37) % = 6.1	- non-employed	GP-3	- admin.	- middle	- full-time	- no change - no info.	- no info. - always the same	- inadequate	- failure	- failure	- failure	- bad - failure	- yes	- yes	- yes
C1(23.2 n=35) % = 5.8	- full-time	GP-2	- admin. manag. - technical - maintenance - production	- middle - middle/high	- full-time	- upward	- defines 31 - different options	- adequate	- not objective - successful	- successful - bad	- not objective - bad	- successful	= X	- no	- no
C2(16.6 n=25) % = 4.0	- full-time	GP-1 GP-2	- admin. manag. - social relations - technical - R+D	- middle - middle/high	- odd jobs - full-time	- upward - complex route	- > 3 options	- adequate - complex	- successful	- bad - slightly successful	- successful - failure	- successful	- yes	- no	- no
C3(15.9 n=24) % = 4.0	- full-time	GP-1 GP-2	- admin. manag. - social relations - technical - R+D	- middle	- full-time	- upward	- always the same - 31a - 25a	- complex	- successful	- successful	- successful - slightly bad	- successful	- no	- no	- no
C4(40.4 n=61) % = 10.1	- irregular parttime - full-time (=X)	GP-2 GP-3	- management - social relations	- middle	- unemployed	- upward - long-term unemployed	- always the same	- adequate	- not objective - bad	- bad	= X	= X	- yes	= X	- no
D1(6.25 n=90) % = 14.9	- full-time	GP-1 GP-2	- admin. manag. - technical - R+D	- middle - middle/high - high	- full-time	- upward	- always the same	- adequate	- bad - slightly successful	- successful	- successful	- successful	- no	- no	- no
D2(6.3 n=9) % = 1.5	- non-employed	GP-2	- maintenance - production	- middle - middle/high	- non-employed	- upward	- defines 25a - >3 options	- adequate	- successful	- successful	- successful	- successful	= X	- NA - slight no	- NA - slight no
D3(27.1 n=39) % = 6.5	- full-time	GP-2	- admin. - technical - R+D	- middle/high - high	- odd jobs - half-time	- slightly upward - unemployed	- different options - >3 options	- adequate	- failure	- failure	- failure	- failure	- no	- NA - slight no	- NA

- A1= Early school drop-outs, return to school with certificate, working during return to school and schemes
- A2= Training poverty
- A3= Early school drop-outs, return with no certificates and extensive schemes.

- B1= Compulsory schooling with nothing or little else.
- B2= Compulsory schooling with later failure in secondary education and schemes.
- B3= Compulsory schooling or vocational education with work experience during studies and schemes

- C1= Upper secondary school leavers with a short route, no certificate, extensive schemes and brief experience in associations.
- C2= Those leaving the upper vocational education stream, with schemes and extensive experience in associations, men.
- C3= University graduate with extensive work experience during studies and schemes.
- C4= Those leaving Basic General Education or the lower vocational education stream who have done a course of some kind and established their situation with some delay.

- D1= Extensive training in all components: higher-level certificates, extensive work and association experience and a high number of schemes
- D2= Those leaving the upper vocational education stream, late insertion.
- D3= Upper secondary school leavers with delays insertion stabilization, following re-entry failure at university and few training pluses.

- GP-1= Managers
- GP-2= Technicians
- GP-3= Skilled workers
- GP-4= Unskilled workers

Time spent in education and lack of job security: routes into employment taken by young Belgians and young foreign nationals

Introduction

After the period of economic recovery between 1985 and 1989, the rise in unemployment which has occurred since 1990 has once again revealed the problems which young people have in finding employment. The job market in Brussels is quite specific in nature, one of the reasons being the high proportion of young foreign nationals¹ it contains. Both politicians and the media point to this as a cause of youth unemployment, and see it as a social problem. In this context, a study of the entry into employment of young foreign nationals assumes a dual importance: the first being scientific, relative to the implementation of studies concerning this population and the second associated more with the social and political uses which could be made of it.

Originally, the call for foreign workers was intended to offset a shortage of workers on the labour market² at the time. This policy, originally intended as a temporary measure, became established with the systematic absorption of immigrant workers into the Belgian production system. Since 1974, the job market in Belgium has undergone far-reaching changes involving, on the one hand, an increase in unemployment in some sectors of production and, on the other hand, a lack of security in the ways in which young people can enter the job market. The restructuring of employment as a result of the crisis has been accompanied by a reinforcement of some selective mechanisms, some of which specifically affect young people, women and immigrants.

As a general rule, the few scientific studies which have been carried out in Belgium on the entry into employment of young people of foreign origin put forward three methods of interpreting this process. Based on a study of the function which immigration plays in regulating fluctuations in workforce requirements, the first thesis³ indicates that in addition to a dualisation of the job market, there is ethno-stratification of actual jobs. Consequently it is claimed that, within the secondary job market, there are some sectors occupied principally by workers of foreign origin. A second interpretation, based on studies specifically concerning young people⁴, supports the claim that young people of foreign origin retain the social status achieved by their parents and that they tend to be under-qualified. It is claimed that, although educated, these young people achieve low levels of qualification and are employed in jobs similar to those in which their parents are engaged. According to this same interpretation, young people of foreign origin do not as a rule remain part of the working class, but rather form an under-class. Finally, a third interpretation⁵ based on a survey of young people living in francophone Belgium indicates the existence of a nationality-based hierarchy as regards entry into employment, with foreign nationals from EC Member States achieving a greater degree of social and economic integration than so-called "Muslim" foreign nationals (Moroccans and Turks). This analysis, which strongly favours the ethnic approach to the job market, underestimates the logic of regional employment markets and, because it takes account of foreign nationals alone, precludes any comparative analysis. Because of their subject matter, all three interpretations ignore the time factor in the process of entry into employment, and

view all situations identically by attributing causal values to a variable which is often insufficiently analysed: the nationality of origin.

In order to improve our assessment of entry into employment, it is necessary to introduce the *time* factor, and to consider entry into employment not as a temporary mechanism occurring at one particular point in time, but rather as a process which takes place over a period of time. Consequently, in order to move away from interpretations based on fixed points in time, we opted for a dynamic interpretation of the concept of entry into employment, seeing it as *an institutionally-organised process crossed by selective movements*. This approach is being acknowledged increasingly by researchers in social sciences, mainly as a result of research into routes into employment. Our contribution, which is based on a longitudinal survey of young people living in the Brussels area, can be seen in the context of this approach. Finally, the methods we used involved first, underlining the problems experienced by young people in particular in entering employment and, secondly, revealing the differences and similarities experienced by Belgians and foreign nationals in entering employment, taking account of the effects of levels of education and social and gender differences.

1. Presentation of the research

1.1 Deciding on the focus of the survey

In the main, research was directed at the routes into employment followed by young people of immigrant origin living in Brussels, compared with those of a group of young Belgians. In many aspects of life - family life, education, training, work - young people of immigrant origin face the same problems as young Belgians; however, they also have to overcome difficulties associated with their foreign "condition", and being part of a stigmatised group. The aims of the research were, first, to reveal the conditions and positions which young foreign nationals share with their Belgian counterparts and, secondly, to identify the situations and factors which classify young foreign nationals as a group which encounters discrimination.

The research method used to carry out the survey was a questionnaire completed by around thirty semi-directive interviews. Because the principal focus of the survey was young people likely to be entering the job market after leaving compulsory education, the sample was made up so as to favour a population with the least likelihood of going on to higher education. A preliminary survey of randomly-selected schools was carried out in May 1991, interviewing young people in their final year of secondary education. The questionnaire was constructed around different themes: school, family, accommodation, cultural identity, views on work and their career plans. They were interviewed again in May 1992. The second questionnaire was more concerned with entry into employment over the past twelve months. Finally, a third survey of the same young people was carried out in May 1993. By repeating the survey by questionnaire, we can identify routes into employment over the 24-month period. The questionnaires were administered by researchers at the young people's homes, to keep the number of replies lost to a minimum.

1.2 Selecting the sample

There were several possible methods of selecting the sample. The final choice was made on the basis of the advantages and disadvantages of each of the sampling systems in relation to the objectives which had been set. We could have selected a representative sample of young people in the final year of secondary education (regardless of the orientation of that education). This technique would, however, have resulted in over-representation of those pupils who were going on to higher education. Another method involved carrying out the survey with young people who had left school in June 1991 and registered as jobseekers with ORBEm⁶ in September. This would have meant losing all information on young people who found jobs immediately after leaving school, without ever being registered as jobseekers. We therefore decided that our sample should be made up of young people coming mainly from technical and vocational education, who had a greater likelihood of finding themselves on the job market in September 1991; this sample held some surprises, as will be revealed later. The subjects studied and career aspirations decided upon for the sample was not based on the distribution of qualifications at the end of compulsory education as this appears in the Belgian Ministry of Education's statistics, but was based on unemployment statistics, and in the main on the distribution of qualifications of young jobseekers. Consequently, most of the young people in the sample are not strictly speaking in a sphere of social exclusion, but in a sphere of relative vulnerability.

1.3 General characteristics of the young people involved

The first survey received replies from 945 young people in their final year of secondary education in May 1991. The following year the number of respondents was 797. The number of replies lost was principally due to changes of address and occasionally to their refusal to respond to the second survey. Girls were slightly under-represented in the sample. 71% of the young people were in the 18-20 age bracket. The main reason for the presence of 28% of individuals aged over 20 is that some students are very behind in their studies.

Native Belgians account for 31.5% of the sample. The distribution of foreign students is in keeping with the distribution of nationalities observed in secondary education in Brussels. Moroccans account for 33% of the sample, Turks 7.4% and Italians 7%. The distribution of students according to present nationality shows that 76 young people, or 14.7%, have assumed Belgian nationality and that 20 young people are in the process of naturalisation. Consequently, the percentage of young Belgians is 44.7% at the present time. The nationalities of students most frequently assuming Belgian nationality are Moroccan (46%) and Italian (11%). This means that one in five young Moroccans has taken Belgian nationality.

Table 1: Distribution of young people according to gender and nationality group

	Belgians	EEC	Non-EEC	Total
Men	154 36.7%	75 17.9%	191 45.5%	420 100%
Women	126 34.4%	53 14.1%	198 52.5%	377 100%
Total	280 35.1%	128 16.1%	389 48.8%	797 100%

The young people involved are from the following educational backgrounds: 21% from general education, 24% from technical education, 41% from vocational education, 7% from CEFAs⁷ and 7% from apprenticeships. Students are not evenly distributed within these different backgrounds according to nationality and gender. The modal background is the sixth year of technical education for Belgians and EC foreign nationals, and the sixth year of vocational education for non-EC nationals. Significant numbers of the latter also come from short vocational education cycles (4P and 5P) and are under-represented among the apprentices, where EC nationals, on the other hand, are well represented. Regardless of nationality, more girls come from general education. However, there are more non-EC girls in vocational education than in technical education. On the other hand, they are vastly under-represented in part-time training (CEFA and apprenticeship).

Irrespective of nationality and year of study, an important distinction arises between girls and boys in their choice of discipline in the case of young people from technical and vocational education. A large majority of boys have chosen the "Industrial" options, whereas the girls have opted mainly for "Administration - Office Work". If we distinguish between the different nationalities, a further difference is revealed: the clothing option is mainly chosen by non-EC girls. As this is not a representative sample, no conclusion can be drawn from the various distributions observed; they are merely illustrative of the sample and do not explain the differences observed in the various choices of discipline.

1.4 Social and professional status of the parents

A study of the status of the fathers reveals a relative diversity of situations according to nationality. The number of those in employment is highest amongst Belgians and the majority of fathers from EC countries. The latter also have the highest rate of self-employment. The status of social security claimant (pension, early-retirement benefit, invalidity allowance and unemployment benefit) is more frequently encountered among non-Belgian fathers than among Belgians. Even at the level of the various nationalities, there are significant differences. For instance, the percentage of fathers from EC countries in employment is similar to that of Belgian fathers, whereas far greater numbers of Moroccans and Turks are invalids (17%) or unemployed (20%). Similarly, more Moroccans and Turks are retired (17%

and 12% respectively). Finally, the level of education according to nationality completes the information about the fathers of the young people interviewed. The modal value for Belgians is higher secondary education, whereas for foreign nationals it is primary education, with the exception of Moroccans, who have the highest rate of those who have received no education. Turks present a more varied picture.

The mothers of Belgian students are, on the whole, more likely to be working than the mothers of foreign students, although fewer mothers of Italian or French nationality are housewives. Mothers are classified according to three categories of status: employee or freelance worker, social security claimant or housewife. The great majority of Moroccan mothers are housewives. Italian mothers are more likely to be unemployed or invalids; whereas Belgian and French mothers are most likely to be working. If we consider only working mothers, we can see that the mothers of foreign students are engaged in manual work, whereas Belgian mothers tend to be engaged in non-manual work. Mothers of Belgian students also tend to have a higher level of education than Belgian fathers. Mothers of foreign students, on the other hand, share the same educational characteristics as foreign fathers.

2. Analysis of young people entering employment over an 11-month period

This contribution concerns the results obtained 11 months after the first survey, concentrating on the effects of three variables (gender, nationality and level of education) on the ways of entering employment. We start by showing a comparison of plans for entering employment and reality. We go on to study how entry into employment came about, including an analysis of the posts held through the period and changes in status. Finally, we show the individual routes followed, on the basis of which we make an analysis according to type - the aim being to determine, by taking a number of variables into consideration, the different types of route into employment.

In order to ensure a clear understanding of our thesis, we have drawn up a list of seven categories of position occupied during our period of observation, i.e. from July 1991 to May 1992:

- *secondary education* (Sec.E): contains all those young people who are in full-time education at secondary school.
- *further non-university education* (FE): includes young people attending both short and long cycles at an establishment of higher education other than a university.
- *higher university education* (HE): relates to young people at university.
- *stable employment* (SE): covers young people who have succeeded in obtaining a permanent employment contract, plus the self-employed.
- *insecure employment* (IE): includes all other types of status where fixed-term and temporary contracts predominate.
- *jobseeking* (JS): covers all young jobseekers, regardless of administrative status (remunerated or not, registered or not).
- *withdrawn from job market* (WJM): covers all situations where employment is not being sought, principally periods of holiday and military service.

2.1 Plans for finding employment formulated in May 1991 and the situation in October 1991

We will begin our presentation and analysis of young people in the group entering employment with a comparison of plans to find employment at the end of the school year, formulated at the time of the first survey in May 1991, and the situation in October 1991, following the second survey.

Although the sample we made up comprised young people who were most likely to find themselves on the job market at the end of the school year, the results of the first survey revealed a strong propensity among the young people interviewed to stay on at school. We cannot say whether this is the result of a strategic choice demonstrating a desire to stay on at school or the result of changing plans so as to avoid or postpone entry into employment for fear of finding themselves unemployed; in this context, staying on at school makes a virtue of necessity.

Although in May 1991 half of the group expressed a desire to continue in full-time education, 60% had registered for courses in October 1991, and the proportion of those who wished to enter the job market (35%) was identical to those who were actually in that situation in October 1991. However, those who had planned to enter the job market were not necessarily in that situation, and the same is true of those who wished to continue in full-time education. The greatest difference between plans and reality was observed for those young people who remained in secondary education. Although 6% of young people had planned to continue in full-time education, the percentage who actually did was 22%. There are two principal reasons for this difference. Almost 30% of young people staying on at school do so following failure in their final year at school; consequently, some young people who anticipated going on to higher education or being in the job market in October 1991, remained in secondary education. Then there is the fact that the desire to complete a course of technical and vocational education with a view to obtaining additional qualifications is stronger than in the past. Although vocational education courses terminate in the sixth year, an increasing number of young people stay on for a seventh year so as to obtain the necessary qualifications to go on to higher education. The importance which is thus attached to qualifications is reflected in the fact that 76.6% of young people continuing in full-time secondary education are over 20 years of age, although they are no longer obliged to remain at school.

Table 2: Comparison of plans for finding employment formulated in May 1991 and the actual situation in October 1991

Plans May 1991	Situation in October 1991							Total
	Sec.E.	FE	HE	SE	IE	JS	WJM	
Sec.E	30	11	1	1	2	2		47
FE	52	118	23	9	15	18	4	239
HE	16	36	52		1	4	4	113
Work	45	33	2	50	50	85	23	288
WJM	1	2				3	1	7
MS	5	4		5	8	5	3	30
Un-sure	28	11	2	4	10	13	5	73
Total	117	215	80	69	86	130	40	797

Of those young people who had planned to enter the job market, 35% had found a job and 30% were seeking employment in October 1991, whereas the remainder were continuing with their studies. It is true to say that the majority of those who were unsure which course to take, opted for school rather than work.

Differentiation by gender of plans to find a job show that girls with the same level of education as boys were more inclined to plan to continue their studies and less inclined to enter the job market directly. With fewer girls than boys experiencing failure at school, more girls entered higher education in October 1991. Another important distinction arises as a result of differentiation by nationality of origin. Although the plans of young Belgians were about average for the group as a whole, young people of EC origin and those of non-EC origin had rather different plans. Those of EC origin were mainly interested in entering the job market, whereas the second group preferred to continue with their studies. This difference relates mainly to young Italians and young Moroccans and, to some extent, reflects the situation observed in French surveys between the Portuguese, for whom social advancement is essentially a result of financial success, and the Algerians, who attach greater importance to success at school⁸

2.2 Changes in the situation over the 11-month period

In order to appreciate the changes in the situation over the eleven-month observation period, we used two means of presenting data. The first is a graph showing the different types of status occupied by the young people throughout the whole period. The second is a comparison of figures for two precise dates: the beginning of the period (October 1991) and the end of the period (May 1992). In each case, we will show how the situation is affected by two variables: gender and nationality of origin.

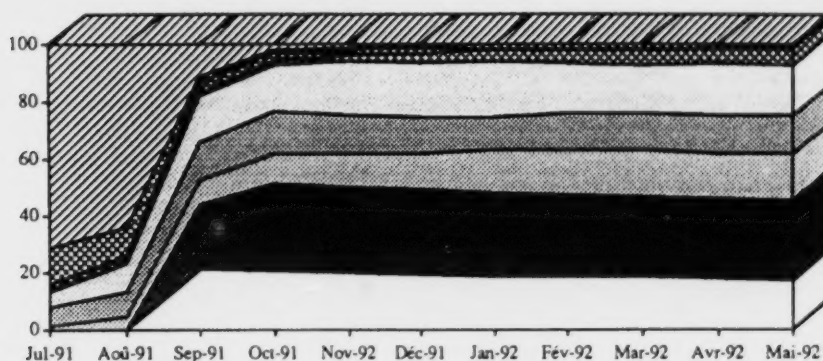
Changes in the situation of boys and girls

Changes in the situation of members of the group throughout the eleven-month period are quite different, depending on gender (Graph 1). If we exclude the first three months of the observation period, during which many young people were not classified under any specific status (holidays), the principal trends towards entering employment become evident from October 1991. As we have stated, a considerable number of students interviewed had opted to stay on at school. This course of action was, however, more popular with girls; in October 1991, 68.2% of girls were continuing their studies, compared with 51.2% of boys. Conversely, the percentage of boys on the job market (41.9%) was higher than the figure for girls (28.9%). Another difference between the sexes is evident at this early part of the period: the percentage of those who were unemployed. Although fewer girls were on the job market in October 1991, the percentage of those who were unemployed (56.9%) was higher than the percentage of boys in that situation (38.6%).

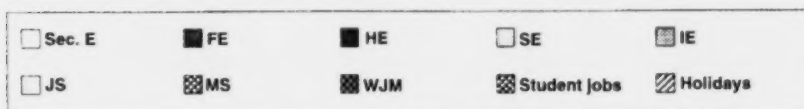
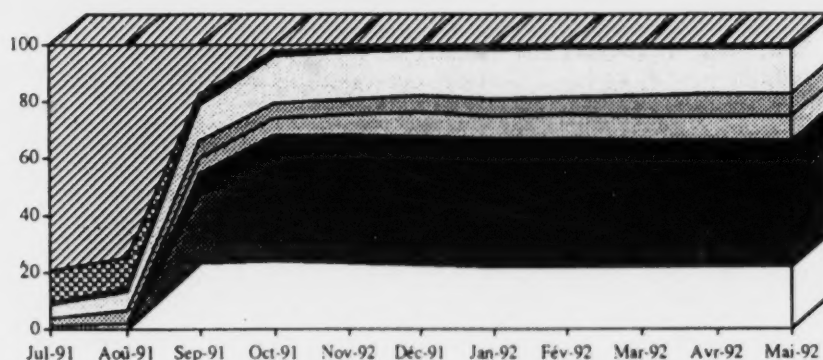
With the passage of time, these trends continue, and become even more marked. Indeed, by the end of the period, 13% of boys who were following a course at school in October, had left by May 1992 and the rate of those still at school at that time had fallen to 45.4%. Fewer girls gave up their studies (4%), and the figure for girls still at school remained relatively stable (66.4%).

Graph 1: Changes in the situation over the 11-month period, according to sex

Changes in the boys' situation



Changes in the girls' situation



For those on the job market, the situations noted at the beginning of the period are confirmed in May 1991. The percentage of girls on the job market remains quite low (32.4%), and the figure for boys has increased slightly (47.6%). The percentage of girls neither at school nor on the job market is practically nil (1%), whereas the figure for boys is 7%. This can be explained by the obligations of military service for part of our male population (Belgians and foreign nationals having assumed Belgian nationality). The unemployment rate for both girls and boys has fallen to 48.4% and 37.5% respectively. Finally, the proportion of those in stable employment is quite high for both sexes and from October 1991 to May 1992 increased from 42.6% to 55.2% for boys and from 48.9% to 52.4% for girls.

Comparison of the positions occupied by boys and girls

Additional information can be gleaned from a comparison of two points in time during the observation period, i.e. October 1991 and May 1992 (Table 3). It clearly shows that boys more readily abandon their studies. The total number of boys in employment has increased, with the proportion of those in stable employment having risen and those in insecure employment having fallen; in other words there has been an improvement in their status. As for the percentage of young people without jobs, this is higher at the end of the period than it was at the beginning, whereas the figure for those who have withdrawn from the job market (WJM) remains stable. In fact, the rise in the number of young males having found employment does not correspond to the number of young people having abandoned their studies, the majority of whom were seeking employment, which explains the rise in the percentage of unemployed.

Table 3: The situation for males and females in October 1991 and May 1992

Males						
	Oct-91		May-92		A	B
Sec.E.	87	20.7%	74	17.6%	82.8%	97.3%
FE	95	22.6%	85	20.2%	88.4%	98.8%
HE	33	7.9%	32	7.6%	97.0%	100%
SE	46	11.0%	69	16.4%	84.8%	56.6%
IE	62	14.8%	56	13.3%	58.1%	64.3%
JS	68	16.2%	75	17.9%	52.9%	48.0%
WJM	29	6.9%	29	6.9%	37.9%	37.9%
Total	420	100%	420	100%		

Females						
	Oct-91		May-92		A	B
Sec.E.	90	23.9%	84	22.3%	93.3%	100%
FE	120	31.8%	119	31.6%	96.7%	97.5%
HE	47	12.5%	47	12.5%	97.9%	97.9%
SE	23	6.1%	33	8.8%	73.9%	51.5%
IE	24	6.4%	30	8.0%	66.7%	53.3%
JS	62	16.4%	59	15.6%	72.6%	76.3%
WJM	11	2.9%	5	1.3%	18.2%	40%
Total	377	100%	377	100%		

A = Percentage of young people occupying the same status in October 1991 and May 1992 compared with the total number of young people in that status in October 1991.

B = Idem compared with the total number of young people in that status in May 1992.

Among the boys, 84.8% of those who in October 1991 were in stable employment are still in that situation in May 1992. For young jobseekers, this percentage is 52.9%. The number of

young women finding employment has risen for all types of employment. Consequently, the percentage of unemployed has fallen, although it is still higher than the figure for boys.

It should also be noted that 73.9% of young women who were in stable employment at the beginning of the period are still in stable employment at the end of the period. This figure is relatively lower for those in insecure employment (66.7%). It can also be observed that 51.5% of women who are in stable employment in May 1992 were already in such employment in October 1991. The figure as regards insecure employment is 53.3%. Finally, 72.6% of women who were jobseekers (JS) in October 1991 are still in that position in May 1992, the figure for men in this respect being 52.9%. On the basis of these latter figures we are inclined to think that a greater proportion of women remain unemployed.

Comparing the situation on these two dates leads us to conclude that more young men than young women remained in stable employment between these two dates, whereas the situation is reversed where insecure employment is concerned. The proportion of female jobseekers on the two dates is higher than the figure for boys. These two assertions do not apply to the period as a whole, but constitute two hypotheses to be tested when analysing the different routes.

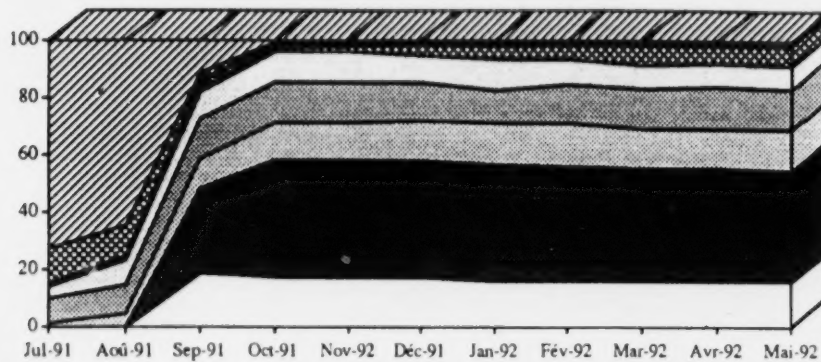
Changes in the situation of young Belgians and young foreign nationals

Our first comment relates to the proportion of students staying on at school, which is higher for non-EC nationals (Graph 2). At the beginning of the period the staying-on rates are 61.7% for non-EC nationals, 58.2% for Belgians and 53.9% for foreign nationals from EC countries. Although this trend is continued throughout the entire period, the figures themselves change. Although all three categories experience a fall in staying-on rates during the period, it is the non-EC nationals who abandon their studies in the greatest numbers during the school year. In May 1992, the staying-on rates are 56.8% for non-EC nationals, 55% for Belgians and 51.6% for foreign nationals from EC countries. Differences can also be observed depending on which of the three types of educational establishment is attended. Non-EC foreign nationals are most likely to remain in secondary education. These are the ones, more often than not, who have failed during the final year at school and therefore, in October 1991, are "repeating" a year. The highest proportion of young people in further non-university education is to be found amongst the Belgians.

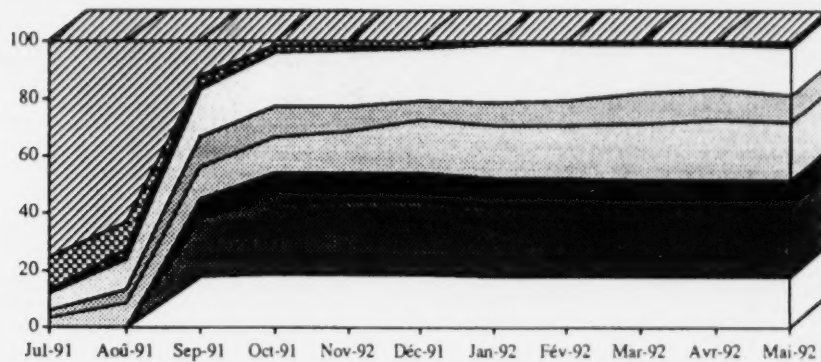
The highest employment rate is found amongst EC nationals, both at the beginning of the period (42.1%) and at the end of the period (46.9%). The rate for non-EC nationals rises rapidly during the period from 31.6% to 40.9%, whereas the rate for young Belgians falls during the period from 38.6% to 36.8%. This fall can be explained by the increase in the number of young people who withdraw from the job market to fulfil their military obligations. The proportion of those in stable employment increases over the period for all categories of young people. It is of the order of 50%, except for young men from EC countries, for whom it is 71%. The unemployment rate tends to fall with time, but significant differences persist throughout the period according to the nationality of origin. The rate for non-EC nationals increases rapidly during the period from 31.6% to 40.9%. Young Belgians have the lowest unemployment rates: 27.8% in October 1991 and 22.3% in May 1992. Conversely, the figures for foreign nationals are high: in October 91 the rate is 44.4% for EC nationals and 61.8% for non-EC nationals. They do fall during the period, but never to the same level as that achieved by the Belgians. In May 1992 the unemployment rate is 36.7% for EC nationals and 56% for non-EC nationals.

Graph 2: Changes in the situation over the 11-month period, according to nationality

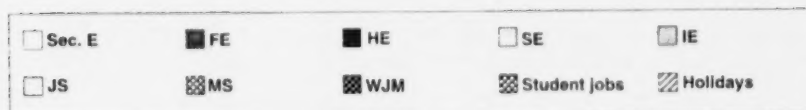
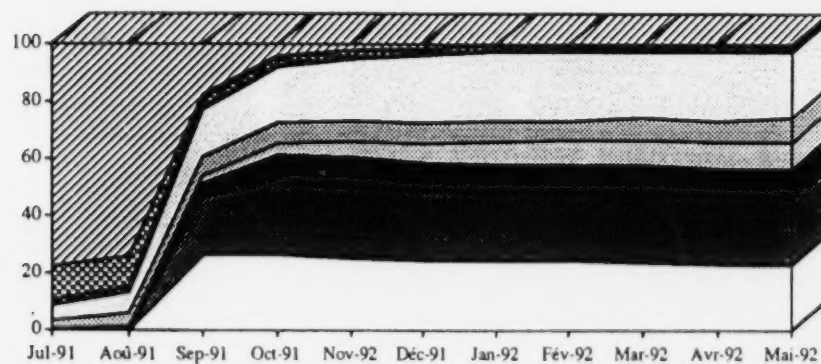
Changes in the situation of Belgians



Changes in the situation of EEC nationals



Changes in the situation of non-EEC nationals



Comparison of the positions occupied by Belgians and foreign nationals

A comparison of the situation at October 1991 and May 1992 (Table 4) presents a different picture from the one we have just painted. We will mention only the most significant factors. As regards education, a higher proportion of Belgians are to be found in post-secondary education whereas the proportion of foreign nationals is higher in secondary education. The number of young people in either stable or insecure employment in October 1991 and May 1992, compared with October 1992 is practically identical for all nationalities: 81% in the first

Table 4: The situation of young people in October 1991 and in May 1992, according to nationality

Belgians						
	Oct-91		May-92		A	B
Sec.E.	49	17.5%	44	15.7%	89.8%	100%
FE	87	31.1%	83	29.6%	94.3%	98.8%
HE	27	9.6%	27	9.6%	96.3%	96.3%
SE	37	13.2%	40	14.3%	81.1%	75.0%
IE	41	14.6%	40	14.3%	61.0%	62.5%
JS	30	10.7%	23	8.2%	43.3%	56.5%
WJM	9	3.2%	23	8.2%	77.8%	30.4%
Total	280	100%	280	100%		

Young foreign nationals from EC countries						
	Oct-91		May-92		A	B
Sec.E.	24	18.8%	23	18%	91.7%	95.7%
FE	32	25%	31	24.2%	93.8%	96.8%
HE	13	10.2%	12	9.4%	92.3%	100%
SE	17	13.3%	26	20.3%	82.4%	53.8%
IE	13	10.2%	12	9.4%	61.5%	66.7%
JS	24	18.8%	22	17.2%	50.0%	54.5%
WJM	5	3.9%	2	1.6%	20.0%	50.0%
Total	128	100%	128	100%		

Young foreign nationals from non-EC countries						
	Oct-91		May-92		A	B
Sec.E.	104	26.7%	91	23.4%	86.5%	98.9%
FE	96	24.7%	90	23.1%	91.7%	97.8%
HE	40	10.3%	40	10.3%	100%	100%
SE	15	3.9%	36	9.3%	80%	33.3%
IE	32	8.2%	34	8.7%	59.4%	55.9%
JS	76	19.5%	89	22.9%	73.7%	62.9%
WJM	26	6.7%	9	2.3%	19.2%	55.6%
Total	389	100%	389	100%		

A = Percentage of young people occupying the same status in October 1991 and May 1992 compared with the total number of young people in that status in October 1991.

B = Idem compared with the total number of young people in that status in May 1992.

case and 61% in the second. The situation for Belgians is to all intents and purposes identical on the two dates: a low unemployment rate and similar rates for those in stable and insecure employment. The same cannot be said of young foreign nationals. Those from EC countries have seen an improvement in their employment status and a fall in their unemployment rate. The situation is a little different, however, as regards non-EC nationals. Only a small proportion were in stable employment at the beginning of the period, although the trend is for them to catch up with their counterparts by the end of the period. For them, finding employment appears to be a longer process than for their counterparts but, at least where those who have a job are concerned, by the end of the period their position is similar to that of young Belgians and EC nationals. It is, however, this group which tends to remain unemployed longest. Indeed, 73.7% of young non-EC nationals who were unemployed in October 1991, are still unemployed in May 1992. The figure for Belgians is 43.3% and for EC nationals, 50%. Again, this information does not permit us to conclude that the period of unemployment is longer, but it does at least give rise to speculation in that direction.

Gender, nationality and qualifications

Additional information can be gained by making cross-references to the rate of unemployment, gender, nationality and level of education variables. As we saw, the unemployment rate for women is higher than that for men and the rate for foreign nationals is higher than that for Belgians. We also saw that unemployment rates fall with the passage of time. It does appear that the nationality variable doubles the effect of the gender variable. For Belgians, there is very little difference in unemployment rates according to gender at the beginning of the period (27.1% for men and 29% for women), but this difference becomes more significant in May 1992 (19.3% and 26.8% respectively). For EC foreign nationals, the male unemployment rate is 38.1% in October 1991 and 29.1% in May 1992. Conversely, the rate for women remains stable at 66.7%. Compared with their counterparts, non-EC nationals have the highest unemployment rates. The rate for women is 72.9% in October 1991 and 58% in May 1992. Only the rate for male non-EC nationals increases between the two dates, rising from 51.6% to 54.4% and this is due, in the main, to the inclusion in the jobseeker figures of those males who have given up their studies. This over-representation can be explained by the over-representation of young non-EC nationals among those coming from lower secondary education (4P-5P); this level of education has the highest unemployment rate (71%), regardless of nationality. Although nationality and gender have little effect at this level of education, the same cannot be said of other levels. Girls have a higher rate of unemployment than boys of the same educational level, and non-EC nationals have a higher rate than Belgians and EC nationals. This reveals the more selective and discriminatory nature of the gender and nationality variables on the job market in certain situations.

2.3 Changes in status and average time in any one status

A month-by-month study of changes in status for the group as a whole provides information on the number of individuals in any particular status and the average length of time in that status; it also provides information on status changes (the relationship between the original status and the destination status) according to the number of people affected and the average length of time in the original status.

The group of young people who have the longest average length of time in a particular status are those who have continued with their studies: 189 young people were in secondary education for an average of 8 months, 219 young people in further non-university education for 8.4 months and 81 young people in higher university education for 8.4 months.

For young people in work, the longest average length of time (6.6 months) in a particular status applies to the 125 young people in stable employment, followed by the 232 young people seeking employment (5.1 months), and finally the 169 young people in insecure employment (4.8 months). Fewer young people found stable employment than those who had found insecure employment. The length of time for the former is, almost by definition, longer than that for the latter.

In studying status changes, which we will now deal with, the average length of time in a particular status always refers to the original status. Because of the very small number of movements from employment back into education, we have considered only three types of destination status: stable employment, insecure employment and jobseeking. Table 5 shows the principal movements and the average length of time in the last status. Two young people left secondary education after 4 months to go into stable employment; 4 others left after 1.5 months to go into insecure employment and 23 left after 3 months to seek employment.

Consequently, most young people having left secondary education, after a brief period in the status of student, to enter the job market, are jobseekers in the majority of cases. Conversely, most of those who have abandoned their higher education after an average of 4 months have found employment (3 in stable employment and 4 in insecure employment).

Because our observation period begins with the holiday period which follows the end of the school year, it is interesting to note the change of status of young people who find themselves in this situation at the beginning: it appears that 48 young people are in the situation of being on holiday for 1.9 months and then go into stable employment, after 1.5 months 51 go into insecure employment and after 2 months 100 others start seeking employment. After a holiday period, only half the population entering the job market quickly enter into employment.

Table 5: Young people who have changed status and the length of time in the last status

Original status	Destination status					
	SE		IE		JS	
	No.	Length	No.	Length	No.	Length
Sec.E.	2	4.0	4	1.5	23	3.0
FE	3	4.7	4	4.0	4	4.0
HE			1	6.0		
SE			8	3.1	11	4.2
IE	23	3.5			32	2.4
JS	36	3.4	48	3.4		
Holiday	48	1.9	51	1.5	100	2.0

Within the group of those on the job market, the principal movements are as follows: individuals who have left stable employment are more likely to be jobseekers than to have found insecure employment. The number of young people moving from insecure to stable employment (23, after 3.5 months) is lower than the number of those who move from insecure employment to being jobseekers (32, after 2.4 months). Finally, more young jobseekers are likely to find insecure employment (48 individuals) than stable employment (36 individuals). These status changes show that insecurity is more prevalent than stability. Furthermore, the short duration of the movement (around three months) from being employed to seeking employment and vice versa underlines the relative instability of employment for some young people. This general appreciation of insecurity and instability is confirmed by a study of the most recent status (May 1992), and the average length of time in that status. Of all those young people who had decided to enter the job market, almost half (134) were seeking employment for the longest average length of time in any one status, namely 7.3 months. The 102 young people in stable employment at the end of the period had been in that status for 7.1 months, and the 86 individuals in insecure employment had been in that status for 6.8 months.

Differentiation by gender reveals the relative insecurity of female employment compared with male employment. In all cases, status changes involve greater insecurity for girls than for boys. Although more boys give up secondary education than girls, those girls who do abandon their secondary education are all jobseekers. Where an individual loses a stable job, the most likely destination status is jobseeking, but this is more often true for girls than for boys. This differentiation is even more marked in the case of insecure employment. After leaving insecure employment, the destination status for boys is most likely to be stable employment, whereas girls are more likely to be jobseekers. Finally, the movement from jobseeking to finding employment is also unfavourable for girls; boys are as likely to find stable employment as insecure employment, whereas twice as many girls are in insecure employment as those in stable employment.

A comparison of the different nationalities also reveals other contrasting positions. Young people leaving stable employment are more likely to find insecure employment if they are Belgian, whereas foreign nationals (without distinction) are more likely to be jobseekers. This same Belgian/foreign nationals contrast is also true when leaving insecure employment; most

Belgians go into stable employment, whereas most foreigners are job-seekers. Conversely, EC nationals are more likely to find stable employment as a result of jobseeking, foreign nationals are as likely to find stable employment as insecure employment, but most Belgians find insecure employment. Access to stable employment varies according to nationality. Belgians are in stable employment after the holidays (50%), insecure employment (24%) or are jobseeking (17%); for EC nationals the order is as follows: holidays (44%), jobseeking (40%) and insecure employment (12%), and for non-EC nationals: jobseeking (42%), holidays (37%) and insecure employment (19%). It appears, therefore, that entry into stable employment is less likely to be via a movement into insecure employment for foreign nationals than for Belgians. There are two possible explanations for this. First, the fact that more Belgians are in insecure employment may stem from Belgian males' obligation to do military service, which obliges them temporarily to give up stable employment. Secondly, young Belgians may view insecure employment as a means of achieving stability, whereas foreign nationals see only its insecure aspect and continue seeking stable employment. A less clearly-defined variation on this hypothesis would be to say that for insecure employment, selective and discriminatory mechanisms come more into play, and this could be true for both foreign nationals and females.

2.4 Individual routes and classification of types of entry into employment

The presentation of individual routes has been dealt with in two different ways. First, individual routes have been classified to enable us to identify the most frequent routes. Secondly, we have attempted to classify the types of method of entry into employment.

Classification of individual routes

In order to be able to classify the individual routes, we had to modify our basic definitions by reducing to four the number of positions occupied, as follows:

- stable employment (SE); contains the same elements as the old category of the same title,
- insecure employment (IE); contains the same elements as the old category of the same title,
- unemployed (UE); includes young jobseekers (JS) and those who have withdrawn from the job market (WJM),
- in full-time education (FTE); includes all young people in full-time education (Sec.E. + FE + HE).

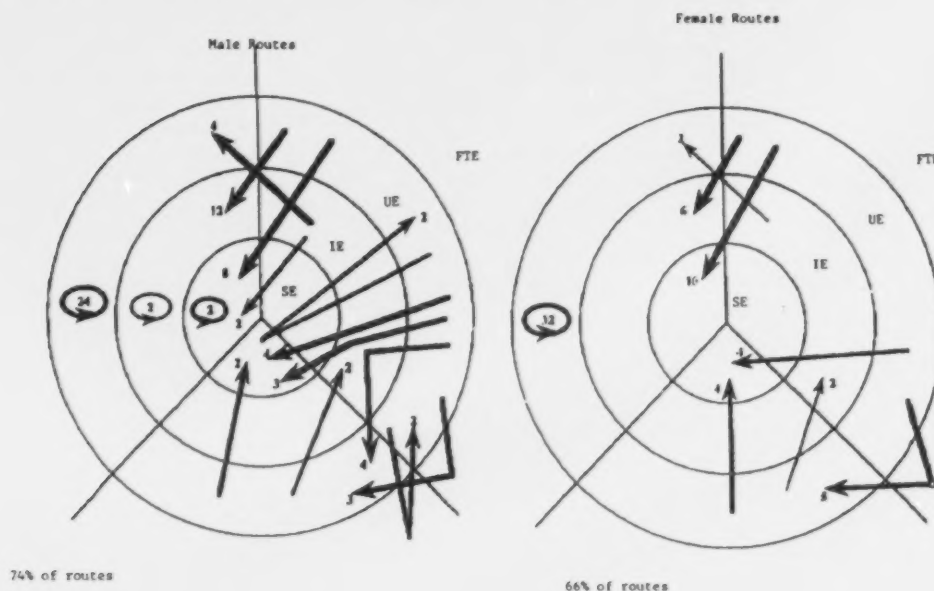
The individual routes were made up simultaneously of the various types of status occupied and the length of time in each status over the 11-month observation period. Along with each status occupied is a note of the length of time spent in that status, so that the least possible information is lost. In addition, the length of time spent in a particular status has been divided into three periods: 1-4 months, 5-8 months and 9-11 months. The classification of routes was carried out separately for males and females on the one hand, and for Belgians, EC nationals and non-EC nationals on the other hand.

Individual routes for males and females

The most frequent route for both males and females is continuing in full-time education (FTE), the figure being 45.5% for boys and 66% for girls. This confirms previous observations. The predominance of continued full-time education over entering the job market is enormous, even though we are dealing with a reference population coming essentially from technical and vocational education who traditionally enter the job market after secondary education. Furthermore this observation applies to girls more than boys. Given that these individuals have not undergone any status changes during the period in question, we will focus our attention for the moment solely on those young people who have entered the job market. All figures (percentages in particular), will refer to this sub-population.

Graph 3 illustrates the principal routes followed by boys and girls onto the job market⁹. The most frequent route for both boys and girls is "unemployed". However, this applies more to girls (32%) than to boys (24%). For instance, 11 months after leaving school, over one quarter of this population has not yet managed to secure their first job. Conversely, this means that 68% of girls and 76% of boys have, during this same period, had a job of some kind, whether permanent or temporary.

Graph 3: Comparison of routes for girls and boys



For males, the following are the principal routes, in order of importance:

- from unemployed (1-4 months) to insecure employment (9-11 months): 12%
- from unemployed (1-4 months) to stable employment (9-11 months): 8%
- from unemployed (1-4 months) to stable employment (5-8 months): 4%
- from insecure employment (1-4 months) to unemployed (9-11 months): 4%
- from unemployed (1-4 months) to insecure employment (1-4 months) to unemployed (5-8 months): 4%.

These routes, together with the status of remaining unemployed, account for 55% of routes for males.

For females, the following are the principal routes, in order of importance:

- from unemployed (1-4 months) to stable employment (9-11 months): 10%
- from unemployed (1-4 months) to insecure employment (9-11 months): 6%
- from unemployed (1-4 months) to continuing in full-time education (1-4 months) to unemployed (5-8 months): 5%
- from unemployed (1-4 months) to stable employment (1-4 months): 4%
- from unemployed (5-8 months) to stable employment (5-8 months): 4%

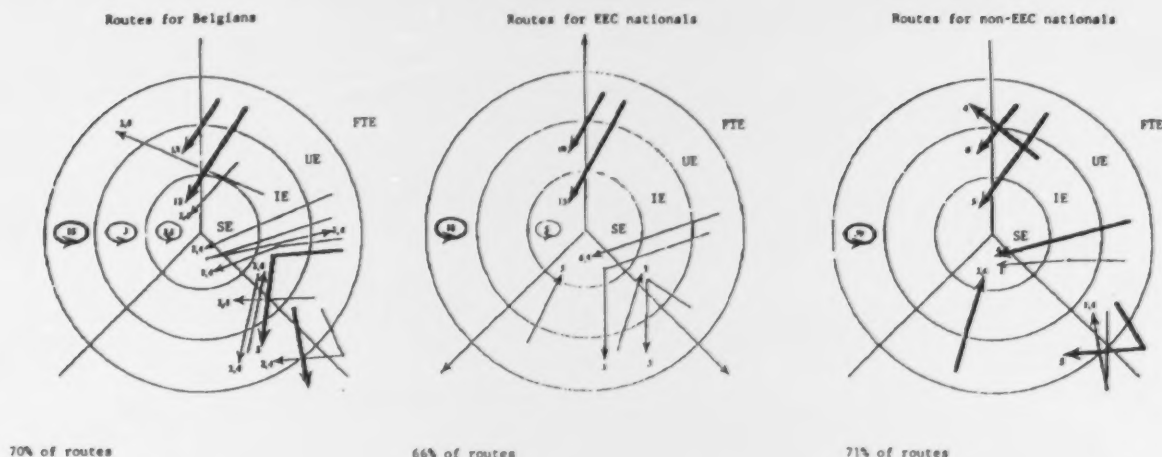
If we add the status of remaining unemployed, this accounts for 61% of routes for females.

There are 61 different routes for boys and 45 for girls. The routes into employment shown above identify, in the main, the process either of remaining employed, or of remaining unemployed. The missing routes, which it was not possible to show because of their numbers, indicate that in the case of boys they end more frequently in employment than in the case of girls.

Individual routes according to nationality

The differentiation of routes according to nationality reveals the contrasting positions we have already observed. The most frequent route is continuing in education: 55.2% for Belgians, 51.6% for EC nationals and 56.6% for non-EC nationals. We have already raised the reasons for these differences above. Other, more significant, distinctions concern young people who have entered the job market, of whom we have made a sub-population. Graph 4 shows the principal routes followed by Belgians, EC nationals and non-EC nationals.

Graph 4: Comparison of routes according to nationality



If we take only this sub-population into consideration, we obtain the following results:

For Belgians:

- unemployed throughout the whole period: 15%
- from unemployed (1-4 months) to insecure employment (9-11 months): 13%
- from unemployed (1-4 months) to stable employment (9-11 months): 12%
- from unemployed (1-4 months) to insecure employment (1-4 months) to unemployed (1-4 months): 5%
- in insecure employment throughout the whole period: 3%
- in stable employment throughout the whole period: 2.4%

This accounts for 50% of routes.

For EC nationals:

- unemployed throughout the whole period: 18%
- from unemployed (1-4 months) to stable employment (9-11 months): 13%
- from unemployed (1-4 months) to insecure employment (9-11 months): 10%
- from unemployed (1-4 months) to stable employment (5-8 months): 6.5%
- in stable employment throughout the whole period: 2.4%

These five routes account for 52% of all routes.

For non-EC nationals:

- unemployed throughout the whole period: 39%
- from unemployed (1-4 months) to insecure employment (9-11 months): 8%
- from unemployed (1-4 months) to stable employment (9-11 months): 5%
- from unemployed (1-4 months) to full-time education (1-4 months) to unemployed (5-8 months): 5%
- from insecure employment (1-4 months) to unemployed (9-11 months): 4%

These five routes represent 61% of routes.

Our hypothesis that large numbers of non-EC foreign nationals suffer long-term unemployment is confirmed by these data. The proportion of routes leading to employment is greatest for Belgians. Nevertheless, routes leading to becoming settled in stable employment are more common for EC nationals than for Belgians, who have a greater number of routes leading to insecure employment. For non-EC nationals, there are proportionately fewer routes into either stable or insecure employment. It is often after the longest period in the status of being unemployed that they occupy an employment status. The end of the period is altogether

artificial, and it will be necessary to see at some subsequent point whether young EC nationals or at least a proportion of them, do not also find themselves settled in employment after a longer period of jobseeking. Contrary to the situation of girls, routes for EC nationals are characterised more by late settling in employment than by a constant lack of security.

Classification by type of methods of entry into employment

In order to give an overview of routes into employment (with the exception of the route "continuing in full-time education"), we drew up a classification by type so as to be able to classify all routes. Although it reduces the information to the basic essentials, this classification was devised with the aim of retaining the maximum amount of information possible, giving priority to the status occupied, the length of time spent in a particular status and the direction of status changes.

The seven types¹⁰ are as follows:

- rapid entry into stable employment,
- rapid entry into insecure employment,
- delayed entry into stable employment,
- delayed entry into insecure employment,
- transient entry into employment,
- unsettled entry,
- long-term unemployed

This classification was applied to the routes of boys and girls, and also to the routes of the different nationalities.

Classification by type of routes for males and females

The predominant type is "long-term unemployment", but this applies more to females than to males. In addition, more males are likely to gain rapid entry into employment, whether stable or insecure. Not only do girls experience problems in entering employment, they also take longer to find employment. Routes showing delayed entry, especially into stable employment, are more frequent for females and may be evidence of a longer process of stabilisation. A study of the types "transient entry into employment" and "unsettled entry into employment" supports our previous observations on status changes. The routes for females include the longest periods of unemployment, much more so than those for males. Periods in employment are much shorter and followed by a long period of unemployment whereas males sometimes leave stable employment for insecure employment. These differences appear between females and males, but the biggest difference does not separate the genders, but rather cuts across them. Regardless of gender, three types of entry into employment are clearly evident: routes characterised by entry into employment, those dominated by entering and leaving unemployment and, finally, routes for young people who find themselves unemployed for a long period of time. Although the routes are split according to gender as shown in Table 6, we should not conceal the similarities between the genders, one at each end of the spectrum: stabilisation (rapid or delayed) in employment and long-term unemployment.

Table 6: Routes into employment according to gender (in percentage terms)

	Males	Females	Total
Rapid entry into SE	21.8	17.2	20.2
Rapid entry into IE	14.8	10.9	13.5
Delayed entry into SE	5.7	7.0	6.2
Delayed entry into IE	6.6	6.3	6.4
Transient entry	9.6	8.6	9.2
Unsettled entry	10.5	11.7	10.9
Long-term unemployment	31.0	38.3	33.6
Total	100.0	100.0	100.0

Classification by type of routes according to nationality

An analysis of routes according to nationality reveals significant differences. The three types we referred to when discussing routes according to gender, namely employment, employment-unemployment and unemployment, are present again here, but they are very differently distributed according to nationality. The predominant type for Belgians is rapid entry into stable employment. This is even more applicable to EC foreign nationals. However, the dominant type for the majority of non-EC nationals is long-term unemployment. Rapid entry into insecure employment is also higher for Belgians. As we mentioned in the first part of the study of routes, foreign nationals are less likely to enter insecure employment, either rapidly or after some delay. To date, delayed entry does not counterbalance the shortage of both insecure and stable employment which non-EC nationals experience. Those whose routes are similar to those for Belgians and EC nationals are in a minority. Gaining access to that first job is very difficult. Young Belgians are most likely to follow routes into employment by one means or another. Whereas routes followed by Belgians appear to be drawn towards entry into employment, routes followed by non-EC nationals appear to experience difficulty in shaking off unemployment. Routes followed by EC nationals, on the other hand, are characterised by two opposing poles: stable employment and long-term unemployment. Nationality may produce different effects, but it does not constitute a causal variable.

Table 7: Routes into employment according to nationality (in percentage terms)

	Belgians	EC	Non-EC	Total
Rapid entry into SE	24.8	29.0	11.8	20.2
Rapid entry into IE	20.0	11.3	10.7	13.5
Delayed entry into SE	4.0	9.7	6.5	6.2
Delayed entry into IE	8.8	3.2	5.9	6.4
Transient entry	11.2	11.3	7.1	9.2
Unsettled entry	12.0	11.3	10.1	10.9
Long-term unemployment	19.2	24.2	47.9	33.6
Total	100.0	100.0	100.0	100.0

Conclusion

The routes into employment followed by Belgian boys are the most likely to be characterised by stabilisation in employment. The proportion of girls in this situation is slightly less. Conversely, girls are more likely to experience long-term unemployment. The different types of route are also quite different according to the three nationality groups. Two groups appear to do particularly badly: girls and non-EC nationals. In the case of the latter, stabilisation in employment is achieved almost exclusively through obtaining stable employment. Furthermore, status changes are proportionately less favourable to them, so that they are more likely to lose stable employment and become jobseekers. The intermediate position of, say, being in insecure employment, whether this is to access stabilisation or to avoid unemployment, is the least likely situation in which they might find themselves. Gradual stabilisation is more typical of young Belgian males, who have a greater mobility in unemployment. The process of entering into employment for girls and non-EC nationals involves finding a job and not losing it. Paradoxically these two populations who, compared with the remainder of the sample have more difficulty in stabilising themselves in employment, suffer most from the selectivity of the job market, and are most discriminated against, are also those whose favoured route is to continue in full-time education. This begs the question: is this a strategy to overcome the problems which their counterparts experience on the job market or an evasive measure for fear of being confronted with unemployment?

Notes

¹ Foreign nationals account for 29% of the population of Brussels; in the 0-15 age group, the percentage is 40%.

² **Martens A**, *Les immigrés. Flux et reflux d'une main-d'oeuvre d'appoint* (Immigrants. The ebb and flow of an auxiliary workforce), EVO-PUL, Louvain, 1976.

³ **Martens A**, "L'insertion des immigrés dans l'emploi" (Immigrant workers' employment) in **BASTENIER A**, **DASSETTO F** (ed.) *Immigration et nouveaux pluralismes* (Immigration and the new pluralism), Brussels, Ed. de Boeck, 1990.

⁴ **Bastenier A**, **Dassetto F**, "La deuxième génération d'immigrés en Belgique" (Second generation immigrants in Belgium), *Courrier hebdomadaire*, No 907-908, CRISP, 1981; **BASTENIER A**, **DASSETTO F**, *Etude des facteurs susceptibles d'être responsables de la morbidité des travailleurs migrants* (A study of likely causes of immigrant worker morbidity rates), GREM, Roneo, UCL, 1985, **BASTENIER A**, **DASSETTO F**, *La situation de formation professionnelle des étrangers en Belgique* (Foreign nationals and vocational training in Belgium), CEDEFOP, Luxembourg, 1986.

⁵ **Manco U and A**, *Enquête auprès des jeunes issus de l'immigration sur l'insertion aux structures de formation et au marché du travail* (Survey of young people of immigrant descent regarding entry into training structures and the employment market), GRESP-ULg, Liège, Roneo, 1990.

⁶ A public body for jobseekers' registration and placement.

⁷ Centre d'Enseignement et de Formation en Alternance. These are schools where young people can attend training part-time or by alternance.

⁸ **Abou Sada G**, **Zeroulou Z**, "L'insertion sociale et professionnelle des jeunes diplômés issus de l'immigration" (Social and professional integration of young qualified school-leavers of immigrant descent), *Critique régionale*, No. 19, 1993.

⁹ The graphs are made up of three concentric circles, the first of which represents stable employment, the second insecure employment and the third unemployment. Education is outside the circles. The graph is divided by three lines, corresponding to the three periods which symbolise the time spent in a particular status. The routes are represented by arrows. The base of the arrows corresponds to the original position and the arrowhead is the destination position. Arrowed circles show routes made up of one single status. For example, the arrow which starts at the circle "unemployed", is in the 1-4 months sector, and terminates in the SE circle in the 9-11 months sector, means that this is a route which started at the status "unemployed" for a period of 1-4 months, followed by the status "stable employment" for a period of 9-11 (sic) months. The figures next to the base of the arrows apply to the percentage of the route shown.

¹⁰ • rapid entry into stable employment: includes the routes of those who have always occupied this status, plus the routes of those who have been unemployed for 1-4 months (corresponding, in the majority of cases, to the holiday period) and who have remained in stable employment for 9-11 months.

• rapid entry into insecure employment: covers the routes of those who have always occupied this status, plus the routes of those who have been unemployed for 1-4 months and who have then remained in insecure employment for 9-11 months.

• delayed entry into stable employment: contains the routes of those who have been unemployed for 5-8 months and who then found stable employment and remained in that employment for either 5-8 or 1-4 months.

• delayed entry into insecure employment: covers the routes of those who have been unemployed for 5-8 months and who then found insecure employment and remained in that employment for either 5-8 or 1-4 months.

• transient entry into employment: covers routes characterised by entering and leaving employment, but where the latter category is dominant in terms of time.

• unsettled entry: contains routes characterised by entering and leaving employment, but where the length of time spent in the status "unemployed" is predominant.

• long-term unemployment: covers routes characterised by unemployment throughout the whole period, plus the routes of those young people who have left the education system and are without a job.

An analysis of the use of government integration measures made by young people leaving secondary education

Introduction

The 1980s witnessed a progressive worsening of conditions affecting access to employment for all population groups. Strong tensions created on the employment market by the rise in unemployment made it more difficult to find a job and/or to keep it. Those who did find employment during this period are still faced with the problem of the nature of this employment, which often does not match the individual's qualifications or area of specialization. In addition, forms of employment considered less attractive because of their precarious nature or contractually-set lack of permanency are on the rise.

From this point of view, the employment crisis does not affect all categories of the French population equally. Among the groups most deserving of political attention and academic research are women, unqualified workers and young people. Because they are particularly affected by integration problems, young people with little or no qualifications (mainly level V or lower in the French classification: ISCED 3 and upper) are given special attention by government authorities: several times now, the programme which had been set up in the mid-1980s to help young people overcome integration problems has been reinforced by means of complementary or supplementary measures.

In order to promote a better analysis of the role played by these government measures, the Study and Research Centre on Qualifications [Céreq] has carried out two longitudinal surveys based on the observation of young people who could be potential beneficiaries of integration measures (one panel data survey between 1987 and 1989 on young people who had left initial training in 1986, and another between 1990 and 1992 on young people who had left initial training in 1989)¹.

1. Integration conditions affecting young people

Before attempting to evaluate the conditions of integration which have affected young people in France since the end of the last decade, let us briefly describe Céreq's "Panel de l'Observatoire des Entrées dans la Vie Active" [longitudinal survey to monitor entry into active life]. This is a telephone survey involving interviewing a group of persons at regular intervals; the group consisted of young people who could potentially benefit from one of the measures of the government-sponsored programme for integration and who in 1989 had left either secondary school, a CFA [Training Centre for Apprentices] or an SES [Special Education Section]. The survey participants were interviewed three times, in December 1990, 1991 and 1992; a final interview is planned for December 1993².

We have selected three types of indicators in order to describe the role of the programme. First of all, we present the situation of the young people surveyed as it was at the time of the four interviews, every December since 1989³ (1.1). The measures are then subjected to explicit analysis and the frequency of recourse to these measures is quantified by sex and by level

(1.2). Finally, a number of additional indicators are given to help the reader understand the dynamics of integration affecting the various age groups.

1.1 Comparative situations in December 1989, 90, 91 and 92

Chart 4, which is included in the appendix and split into detailed graphs in charts 1, 2 and 3 of the same appendix⁴, shows behaviour patterns varying highly according to sex. For instance, one of the results is the traditional pattern of women making substantial use of programmes in the non-commercial sector (TUC-CES and to a lesser extent training courses). With regard to the measures connected with the commercial sector, there seems to be little measurable difference between men and women. Although men do make more extensive use of them, the difference is not as great as in the non-commercial sector. Again in terms of sex variation, unemployment seems much higher among women. One distinct trend is the overall drop in unemployment in December 1991: this corresponds to a distinct rise in available jobs, especially jobs involving a permanent contract.

As to the dynamics of the situations reported, a rise in jobs contributes to a reduction in measures of both types, but unemployment and inactivity (excluding military service) remain stable. A drop in inactive males is, indeed, essentially due to a reduction in male members of the military. Military service can be viewed as an alternative solution to the employment crisis, but this solution works only once. And finally, even if ordinary jobs (excluding subsidized jobs) are on the increase, just over half of the women and two thirds of the men hold an ordinary job forty-two months after leaving school (for permanent contracts, the figures are 38.4% and 47% respectively).

1.2 Recourse to measures

This section is also an opportunity to draw a comparison with the first series of investigations involving the 1986 school-leavers. The results presented in Chart 5 of the appendix show that in general the rate of recourse to government measures was much higher for the 1986 group within the 18 and 30 months following initial training. There again, differentiation by sex is quite telling, as level IV (upper part of ISCED 3) shows much greater drops among women, whereas for the men this change occurs in level V (bottom part of ISCED 3). In fact, this corresponds to a change among the women, as in the past they availed themselves of measures in a more massive and homogeneous manner. Men also took advantage of them, particularly if they were at a lower level of qualification. The tendency is now the same for both men and women, with both groups availing themselves of government measures particularly if they are at a low level of qualification. The explanation for this can most likely be found in the improved job situation in 1990-1991. On the one hand, access to ordinary jobs was improved, which explains the drop in recourse to measures by the current group compared to the earlier one; on the other hand, the employment market has now become more selective. This explains particularly the improved situation of young people at level IV, who have been using the system to a lesser degree; this also applies, though somewhat less, to young people at level V. What we are seeing here, then, is a marginalization of young people with a very low level of qualification, who are feeling the consequences of this relaxation on the employment market.

Limiting ourselves to the last survey (the 1989 group), we see that pupils coming from special schools⁵ are those who make the most extensive use of the measures and have the lowest access rate to ordinary jobs: more than two thirds of these young people take advantage of a measure within the first 18 months after leaving school. More than eight young people out of ten have made use of the system within forty-two months. Apprentices make the least use of this solution, as half of them are still not involved in December 1992. They have vocational experience already (alternance contracts) and are in special networks, which probably lead to more rapid integration. For instance, they have the possibility of remaining with their apprenticeship master for their first job. And finally, among secondary school leavers, those with a low level of qualification are the ones who most often make use of the measures.

1.3 A few indicators

In an attempt to demonstrate the nature of the dynamics at work among young people with low levels of qualification in initial integration situations, periods of stability in the same job or situation have been noted. These figures are reported in Chart A, without differentiation by sex in view of the low numbers involved⁶.

These low numbers are themselves quite telling, even though the information they give is not new: few young people find a stable job immediately after leaving school. Only 21,332 (approx. 5.4%) remained in a job involving a permanent contract for at least three consecutive years. Moreover, 10,896 permanent contracts were interrupted during the first and the second year... Permanent contracts have undeniably lost their value and are not, or no longer, a synonym of stability in the initial integration phase. An even more interesting fact seems to be that because of the existence of intermediate "waiting" situations such as "mesures jeunes" [measures for young people] or even, probably, military service, unemployment is not a situation where one remains over a long period, at least without interruption.

Chart A - Continued periods in one job or situation

situation:	duration:	12 months	24 months	36 months
self-employed		1,454 ¹	n.a.	n.a.
Community work, solidarity employment				
contract or orientation contract		66,743	5,87	n.a.
Qualification contract		19,727	3,299	n.a.
Temporary work		10,841	n.a.	n.a.
Volunteer military service		4,815	n.a.	n.a.
Time contract		47,995	6,493	n.a.
Permanent contract		165,418	63,522	21,332
Adaptation contract		20,673	2,743	n.a.
Training course		8,642	n.a.	n.a.
Higher education		6,654	n.a.	n.a.
Military service		106,72	n.a.	n.a.
Unemployment		53,441	7,512	n.a.
Inactivity		11,713	n.a.	n.a.

¹ i.e., 1,454 young people spent 12 consecutive months as self-employed workers

To demonstrate the dynamics of integration once again, there were counted, under six headings, the number of transitions between situations per sex; results are reported in charts B and C⁷. Persons going through several changes of the same type have been counted as many times as applicable. Here again, the division according to sex sheds some light on the discussion.

Women leaving employment tend to "transit" towards a measure much more often than men (twice as often). They also "transit" to unemployment more often. For men, inactivity, including particularly military service, is the most frequent destination situation for men, closely following unemployment.

Men leaving a measure find employment somewhat more often than women. It would in fact be necessary to know the nature and total duration of these employment situations to draw more accurate conclusions. We can see, for instance, that women also head for unemployment extremely often. The measures help women almost as much as men in finding employment, but protect them less efficiently from unemployment.

After a period of unemployment, the majority of women find a job. Many of them also avail themselves of a measure, which demonstrates the nature of the measures as an alternative to employment. This is much less evident among the men.

Leaving the "inactivity" category, which includes military service, many men go directly into jobs. This probably means that most of them are in fact returnees from the armed forces.

Chart B - Transitions between situations since July 1989 in % - women

towards:	employ- ment	measure	unem- ploy- ment	inactivity	appren- tice- ship	higher educ.	total numbers (100%)
to:							
employment	n.a.	10.9 ²	73.71	13.46	0.2	1.75	156,781
measure	33.45	n.a.	52.25	11.8	0.5	2	142,386
unemployment	54.02	39.14	n.a.	5.2	0.3	1.34	239,716
inactivity	36.25	29.3	31.35	n.a.	0.9	2.2	113,499
apprent.	19.95	8.35	18.15	53.55	n.a.	0	3,675

1 alternance training contract in a general field after leaving initial training

2 i.e., among 156,781 cases of leaving employment, 10.9% of women avail themselves of a measure.

Chart C - Transitions between situations since July 1989 in % - men

towards:	employ- ment	measure	unem- ploy- ment	inactivity	appren- tice- ship	higher educ.	total numbers (100%)
to:							
employment	n.a.	5.1 ²	48.27	43.83	0.8	2	210,936
measure	39.1	n.a.	35.74	19.28	3.5	2.37	65,938
unemployment	63.67	16.55	n.a.	17.54	1.44	0.8	194,716
inactivity	57.3	9.74	31.23	n.a.	0.63	1.1	211,023
apprent.	39.6	14	20.14	23.06	n.a.	3.2	8,121

1 alternance training contract in a general field after leaving initial training

2 i.e., among 210,936 cases of leaving employment, 5.1% of men avail themselves of a measure.

To conclude, it should be noted that for the three situations for which the man/woman comparison is directly relevant (employment, measure, unemployment), women have a much higher rotation rate than men, which probably shows a lesser degree of stability in the initial integration phase.

This section, which has described the extent of recourse to the integration assistance programme, is now followed by a detailed analysis of unemployment, explicitly taking into account the role played by the measures.

2. Factors affecting duration of unemployment in December 1992

We have found it useful to pay special attention to the nature of the unemployment facing young people in December 1992. We will therefore now concentrate on the factors affecting the duration of unemployment, or more exactly, the duration of the last period of unemployment experienced by the interviewees, whether ongoing or complete. This figure gives the most recent results, even though the last period of unemployment experienced by a given individual may go back several years.⁸

The results described in the next pages are based on estimates of "duration models". Duration models have been developed by biomedical statisticians, and as a result of the need to test the life span of machines and apparatus in industry (cf Kalbfleish and Prentice [1980] or Cox and Oakes [1985] for a complete statistical presentation). The results are to be understood as being valid *ceteris paribus*. This means that the role of one variable can be examined without taking into account the role of other variables included in the estimate. This of course does not protect the observer against the effect of the variables which were not taken into

account because they cannot be or were not observed and which could play a direct role or a role through a third variable.

In order to explain the duration of unemployment - current or complete, depending on whether the person involved is still unemployed or not - we have used the following variables:

- 1) age in 1992
- 2) sex
- 3) level of education at the time of leaving school, in three groups: levels VI and V₂ together (ISCED 1&2), level V and level IV. Please consult the appendix for details on this classification.
- 4) whether the last school year was successful (with diploma) or not
- 5) type of training, in three groups: training in industry, in the tertiary sector, or in connection with what could be called "general knowledge". Please consult the appendix for details of this classification.
- 6) whether the interviewee has children or not, regardless of how many and how old they are
- 7) whether the interviewee lives alone or as a couple, regardless of legal status
- 8) the number of periods of unemployment experienced since leaving initial training
- 9) whether training was in the form of an apprenticeship, special education or traditional secondary education
- 10) whether the interviewee took advantage of a measure in the commercial sector (initiation course for vocational life, adaptation contract, qualification contract) or non-commercial (solidarity employment contract, community work, training course) in 1992 or earlier - i.e. four variables.

The results will be presented in two parts: the first gives the results of the estimate. The duration of the last period of unemployment is explained according to the criteria listed above (2.1). The second attempts to estimate average periods of unemployment on the basis of four arbitrary types of profiles. (2.2).

2.1 Detailed analysis of the role of the variables used

Age does not play a very significant role, although older interviewees tend to have a shorter period of unemployment, especially men.

Age does not affect the duration of the last period of unemployment experienced by an individual very significantly. This is surely due in part to the fact that the sample group is quite young overall and does not exhibit a great variation in age. The youngest is 18 and the oldest 29, with the mode at 21 and the average at 21½.

This having been established, the fact remains that the duration of unemployment is shorter with increasing age, and that this affects young males particularly.

Men experience shorter periods of unemployment.

Sex plays a very important role, confirming one of the usual results seen in relevant literature on the duration of unemployment: with all other factors being equal, men have much shorter periods of unemployment than women.

The duration of unemployment varies for men and women depending on their level of education at the time of leaving school.

Women on level IV have the shortest periods of unemployment, followed by women on level VI and V_{bis}, who experience shorter periods of unemployment, on the average, than women on level V. This shows that the expectations of women on level V are a bit higher than those of women on an inferior level, which reduces their chances of return to employment during a period of unemployment.

Summary for women⁹: level IV >> level VI-V_{bis} > level V

From the point of view of level, the higher men are in the hierarchy of diplomas, the shorter their periods of unemployment.

Summary for men: level IV >= level V > level VI-V_{bis}

This result takes into account the fact that women, more often than men, choose training routes connected with the tertiary sector, whereas men tend to head for the industrial sector. The main difference between men and women in this variable is that for men the difference between levels IV and V is not clear, whereas for women level IV corresponds to periods of unemployment which are, on the average, much shorter.

Having a diploma is an indisputable advantage.

Interviewees who left their last year at school with a diploma have shorter periods of unemployment. This is one of the most clearly visible effects in the overall study, and the surest advantage. Both sexes are equally affected in this respect.

Women with a training route in the tertiary sector and men with a training route in the industrial sector have the shortest periods of unemployment.

Women with a training route in the tertiary sector have shorter periods of unemployment than women with industrial training. The latter, on the other hand, are better off than women with training which falls under our "general knowledge" category.

Summary for women: tertiary > industry > general knowledge

Here again the role of sex is significant: for men the categories are completely different. Men coming from training backgrounds in industry have the shortest periods of unemployment, followed by those with "general knowledge" training. The most disadvantaged are men coming from training routes in the tertiary sector.

Summary for men: industry > general knowledge >= tertiary sector

Taking into account the fact that having followed a training route related to general knowledge does not say much about males, it is particularly the inversed role of the industrial and tertiary sectors which most effectively differentiates women from men.

The sex-related differences in duration of unemployment under this category show quite clearly that the areas of specialization in industry where women tend to gravitate are not the same as the ones involving men. The industrial sector, for women, tends to mean textile and clothing. With these sectors currently undergoing a crisis, women with training in these areas have longer periods of unemployment. Even the electronic industry, which for women had developed into an industrial alternative to clothing and textiles, is now in crisis.

Having children plays a role only for women, corresponding to a significant prolongation of the duration of unemployment.

Having had at least one child does not play a very clear role among men. There are no estimates yielding solid results, mostly due to the fact, undoubtedly, that few of the men within the scope of the survey are involved with fatherhood.

Women, on the other hand, have much longer periods of unemployment if they have had at least one child¹⁰. This variable, together with special education, corresponds to the greatest lengthening of the average duration of unemployment (almost 4 months).

Women living alone have shorter periods of unemployment, as do men living in a couple relationship.

This parameter, i.e. whether the person observed is living alone or as part of a couple, irrespective of other considerations of legal status, was retained as significant. This is another variable which contrasts the sexes quite markedly, as women have shorter periods of unemployment if they are living alone, while for men unemployment then tends to be longer.¹¹

The degree of effect this variable has is also different for men and women: among women the effect is rather limited, but for men it is clearly observable.

Women have shorter periods of unemployment if they have already experienced several of them. The opposite applies to men.

Here again sex plays a major role. The fact of having already experienced periods of unemployment reduces the average duration of unemployment among women. For men, on

the contrary, the duration of unemployment is longer the more often the man concerned has experienced unemployment in the past.

This variable affects women relatively weakly; its effect is much stronger for the men. The figures here cannot, however, be viewed as a decisive result, as it would be necessary to assess and include in the evaluation the nature of the employment contract as well as an indicator of the quality and/or permanence of the employment involved. An analysis according to sectors would also be needed. It has furthermore often been noted¹² that certain categories of workers, like women, had a higher rate of employment rotation. These persons will thus tend to experience shorter periods of unemployment, but many more periods of unemployment and therefore a longer cumulative period of unemployment.

Training in the form of apprenticeship corresponds to a much shorter duration of unemployment, especially for males. Having gone through special education corresponds to a much longer duration of unemployment.¹³

Apprenticeships involve virtually only males (total figures for apprentices are roughly 70% male). This reality is reflected in the estimates as well, as the effect of apprenticeships on the duration of unemployment among women is not clear-cut. For men, the fact of having completed an apprenticeship is a distinct advantage, as these persons clearly have the shortest average periods of unemployment.

Young people whose last school period was spent in special education have periods of unemployment roughly three months longer than the others, with all other factors being equal. This effect is even more evident among women, where unemployment can be up to six months longer.

Recent participation in a measure is associated with shorter unemployment. Participation in a more distant past (and thus premature in terms of vocational routes) is connected with longer unemployment. Measures connected with the commercial sector are associated with much shorter periods of unemployment.

The sample studied here has been selected so as to examine the role of the French programme of integration assistance for young people. In line with this aim, two criteria have been used to define the variable of experience with a measure: (1) having participated in such a measure prior to or in 1992 and (2) having participated in a commercial-sector measure or not. Combining these two criteria results in four variables [see variable (10) at the beginning of section 2].

For women, the fact of having participated in a measure connected with the commercial sector is associated to a shorter average duration of employment. But this duration is clearly shorter if the measure is recent (in 1992). For measures involving the non-commercial sector the effect is less systematic. It would seem that having participated in such a measure prior to 1992 is associated to a longer duration of unemployment. These measures being addressed to a more disadvantaged target group and the beneficial effect of the measure having disappeared over time, young women who might benefit from such a measure tend to evidence the traditional integration difficulties. The effect of participation in a measure for women who did so in the non-commercial sector in 1992 is not particularly strong.

For men, a similar relationship between participation in a measure connected with the commercial sector and shorter unemployment is evident. The effect of this variable is even stronger if the measure involved is recent, in 1992. With regard to the non-commercial sector, a measure in 1992 is associated with shorter unemployment (the effect is less distinct than for measures connected with the commercial sector), whereas measures prior to 1992 involve persons where the duration of unemployment tends to be longer.

This leads us to conclude that the assistance programmes are of a very different nature depending on whether they are associated with the commercial or non-commercial sector. For the latter, what is evident is on the one hand social approach to unemployment (TUC-CES) and on the other social reclassification (training courses) for two target groups who traditionally experience difficulties. For measures associated with the commercial sector, what we are dealing with is more a kind of employment assistance, which can better be described as an adjustment mechanism between supply and demand of labour, as it help young people to correspond to the labour market they are involved in. In other words, these measures play a role of assistance to the labour market.

In summary, and for our overall results, we can draw up the following chart:

Chart D - Synthesis of the empirical results regarding average duration of unemployment (ADU) in connection with each variable used

Variable	Women	Men
1) higher age	little effect - ADU rather shorter	very little effect - shorter ADU
2) sex	longer ADU	shorter ADU
3) school-leaving level	ADU clearly shorter at level IV and longer at level V	ADU clearly shorter at level IV little difference to level V
4) success (diploma) in last school year	ADU clearly shorter	ADU clearly shorter
5) training specialization	ADU shorter in tertiary sector	ADU shorter in industrial sector
6) having at least one	ADU clearly longer	not significant
7) living alone	shorter ADU	longer ADU
8) number of periods of unemployment experienced	ADU lower with more periods of unemployment	ADU higher with more periods of unemployment
9) secondary school, apprenticeship or SES	ADU much longer for SES; not much effect for apprenticeship	ADU much longer for SES; ADU much shorter for apprenticeships
10) non-commercial measure prior to 1992	ADU somewhat longer	ADU somewhat longer
10) non-commercial measure in 1992	ADU somewhat longer	shorter ADU
10) commercial measure prior to 1992	shorter ADU	shorter ADU
10) commercial measure in 1992	much shorter ADU	much shorter ADU

2.2 A few typical profiles

To achieve a better synthesis of the information given in point 2.1, we have arbitrarily defined four typical profiles and their average duration of unemployment.

First of all, we established two opposite profiles so as to set the outer limits within which the results of our estimates can vary. The first profile is associated to the shortest duration of unemployment in the sample: *a 20-year-old male with a diploma on level IV in an industrial specialization area resulting from an apprenticeship, living alone and without children, having taken advantage of a commercial-sector measure within the last year and never previously unemployed (profile 1)*. The average duration of unemployment estimated for a person fitting this profile would vary between six weeks and two months in December 1992.

Profile 2 represents the opposite extreme, as it was chosen to show the maximum variation of our estimates. This would therefore be *an 18-year-old female, level VI or V₂ and without a diploma in what we have called "general knowledge" type of training, having at least one child and living in a couple situation, having participated in a non-commercial measure prior to 1992*

and having attended special education. Thus defined, this profile corresponds to the highest average durations of unemployment (between 16 and 36 months according to estimates).

The other two profiles can be termed credible, as they correspond to the majority of the population. Profile 3 describes a 21-year-old male with a secondary school diploma on level V in an industrial subject. He lives in a couple situation, has no children; he has participated in a commercial-sector measure prior to 1992 and experienced two previous periods of unemployment. This widespread profile corresponds to durations of unemployment varying between just under 3 months and just under 6 months.

The fourth and last profile describes a 21-year-old women with a secondary school diploma on level IV in a tertiary sector area. She lives alone, has no children, has participated in a non-commercial measure prior to 1992 and has experienced one previous period of unemployment. This profile, slightly different from profile 3 described above, experiences a similar average duration of unemployment, ranging between 3½ and 6 months.

Overall, both the more detailed results (2.1) or the more concise ones in 2.2 seem to indicate that although sex, for instance, is a highly significant variable regarding the average duration of the last period of unemployment, each individual's other characteristics as a whole tend to level out these differences somewhat. For their integration to be at least as rapid, women would therefore have to achieve a higher level of qualification.

In conclusion, it can be said that these results describe dimensions that vary rather considerably according to individual profiles, but more important still, it should be noted that transitions into situations which are not necessarily a job are also considered as representing the end of a period of unemployment. The inconvenience here is that too many possible situations on the labour market are merged. The first consequence of this is that the existence of waiting situations (certain measures for instance, or even military service) minimizes the duration of unemployment. A good alternative could be that not only true periods of unemployment should be considered but also periods of waiting for a transition to more stable employment. Here too, however, definitions vary.

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Notes

¹ See the appendix for a detailed description of the scope of the survey.

² The profile of the individuals lost between the various interviews has been studied, and although a certain amount of bias cannot be ruled out, the differences recorded give credence to a certain validity of the results presented in this report. The study was effected on a balanced sample, recording information only on the individuals present at the time of the three interviews (i.e. 2,453 persons representing a population of 390,372 persons).

³ The situation in December 1989 has been reconstructed.

⁴ Charts 1, 2 and 3 also include the notion of grouping under five headings according to whether the person interviewed is unemployed, employed, inactive or taking advantage of one or the other type of measure.

⁵ Pupils with special difficulties and attending specialized institutions.

⁶ Only significant numbers have been reported.

⁷ Only the last column contains actual numbers: the total number of transitions from the situation named in the heading (these figures represent 100%).

⁸ For reasons of simplicity, the term "duration of unemployment" will be used to refer to either current or complete unemployment duration.

⁹ The further left the group, the shorter the average durations observed; >> stands for a distinct difference, > a normal difference and <= a slight difference.

¹⁰ Few women have had several children.

¹¹ cf Galland (1985)

¹² cf, for instance, Joutard and Werquin (1992)

¹³ The reference category# is secondary education (290,843 persons versus 83,129 for apprenticeships and 22,400 for special schools).

List of abbreviations

BEP: Brevet d'Etudes Professionnelles [state certification granted to qualified skilled workers]
BT: Brevet de Technicien [state certification granted after a 3-year upper secondary technical course]
BTn: Baccalauréat Technologique [technical secondary school leaving certificate]
CA: Contrat d'Adaptation
CAP: Certificat d'Aptitude Professionnelle [granted at the conclusion of a short-term technical course]
CEP: Certificat d'Etudes Primaires [former primary school certificate]
CES: Contrat Emploi Solidarité [solidarity employment contract]
CFA: Centre de Formation pour Apprentis
CPA: Classe Préparatoire à l'Apprentissage
CQ: Contrat de Qualification
SIVP: Stage d'Initiation à la Vie Professionnelle [initiation to vocational life]
TUC: Travaux d'Utilité Collective [community work]

APPENDIX

Sources and scope of survey

The CEREQ telephone panel data survey was realized with the cooperation of the "Délégation à la Formation Professionnelle" (DFP) and the Direction de l'Animation de la Recherche, des Etudes et des Statistiques (DARES) of the Ministry of Labour, Employment and Vocational Training.

The basis for the survey is the "decentralized survey" organized jointly by the Direction de l'Evaluation et de la Prospective (DEP) and CEREQ among 1989 school leavers:

school leavers on levels VI to IV (excluding final year - general - of upper secondary) and leavers after 2nd, 1st and final upper secondary year

apprentices leaving the final year at a Centre de Formation pour Apprentis (CFA)

pupils leaving special education sections (SES), four regions only (Lille, Lyon, Orléans and Reims).

"Mesures jeunes" [Measures for young people]

"Measures for young people" include the following institutional formulae:

assisted employment in the commercial sector: the "initiation to vocational life" scheme (SIVP), adaptation contracts (CA) and qualification contracts (CQ)

assisted employment in the non-commercial sector: community work (TUC), replaced in 1989 by solidarity employment contracts (CES)

alternance training schemes

Codification of variables

1) School-leaving levels

Level IV: leaving after the following years (ISCED 3):
2nd year of a vocational "baccalauréat" (12)
1st year of STS + DPECF preparatory year (31)
Complementary training after a "baccalauréat" (44)
2nd year of a vocational "baccalauréat" (49)
Final year of a BTn (58)
Final year of a technical "brevet" (59)

Level V: leaving after the following years (ISCED 3):
one-year CAP preparation (42)
Complementary training after a CAP (43)
1st year of a BTn (47)
1st year of a vocational "baccalauréat" (48)
3rd year of a 3-year CAP (50)
2nd year of a 2-year CAP (51)
2nd year of a BEP
Complementary year to CAP or BEP (53)
2nd year special (55)
1st year S (56)
1st year adaptation (BT or BTn) (57)
2nd year of a 2-year apprenticeship (91)
3rd year of a 3-year apprenticeship (94)

Level VI - V₂: leaving after the following years (ISCED 1 & 2):
CEP (70)
CPA (71)
4th (74)
5th (75)
CPPN (78)
SES workshop class (1st and 2nd year) (80)
SES workshop class (3rd and 6th year) (81)
preparatory 3rd year (61)
1st year of a 2-year CAP (63)
2nd year of a BEP (65)
4th technological year (66)
3rd technological year (67)
3rd year (68)

2) Specialization areas

Industry: codes 03 to 25
Tertiary: codes 26 to 41
general knowledge: codes 42 to 48

3) Employment (as used in charts B and C in the text and in the charts found in the appendix)

The following categories are included in this term:

self-employed (self)
household help (h.help)
temporary (temp)
voluntary military service (vol)
time contract (time con)
permanent contract (perm con)
apprenticeship (apprentice)

4) Measure (as used in charts B and C in the text and in the charts found in the appendix)

The following categories are meant by this term:

SIVP (commercial sector measure)
CES-TUC (non-commercial measure)
CQ (commercial sector measure)
training course (non-commercial measure)

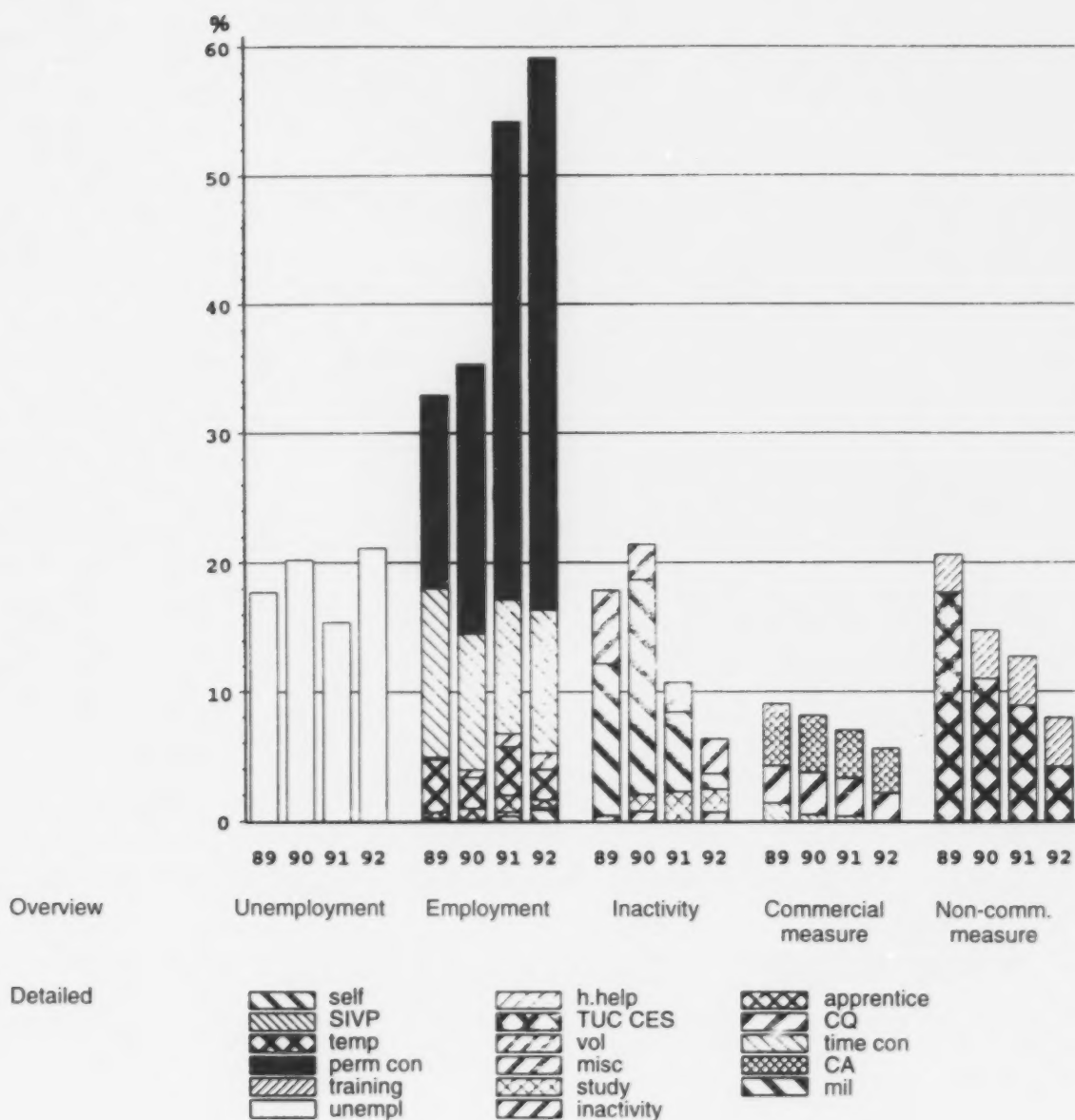
5) Inactivity (as used in charts B and C in the text and in the charts found in the appendix)

The following categories are meant by this term:

inactivity
military service (mil)
other category (misc)
study

Chart 1

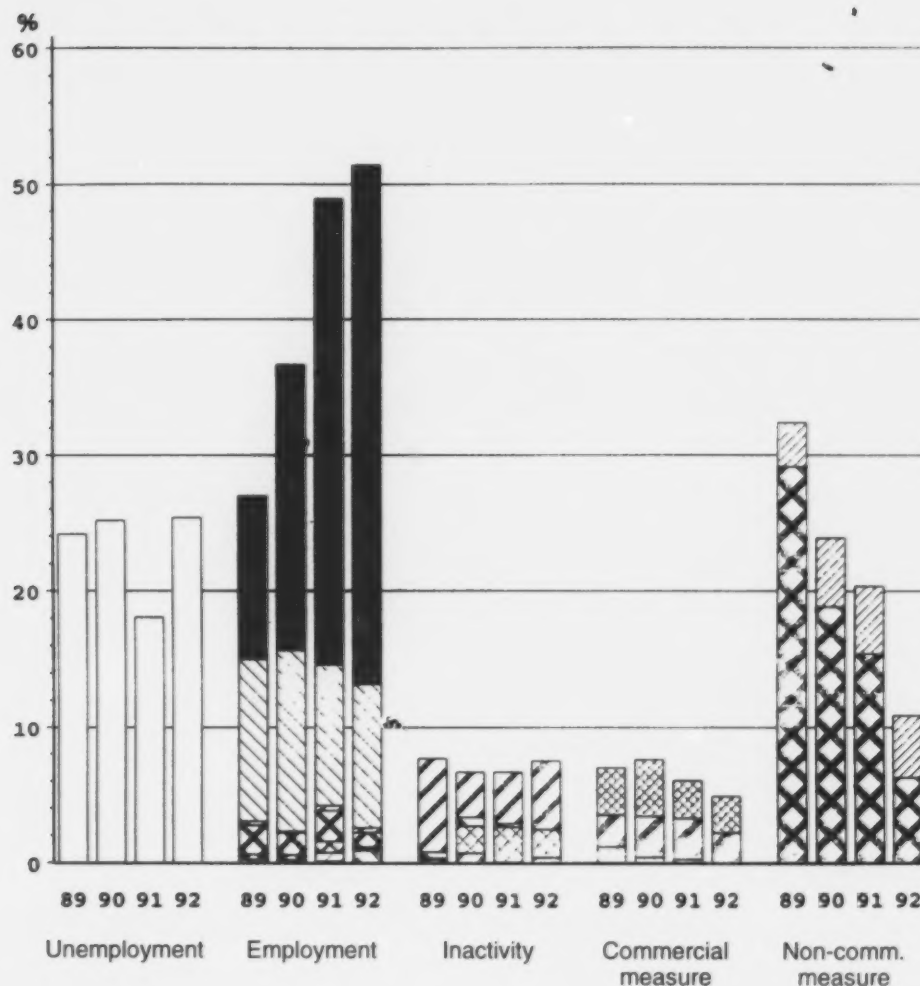
Comparative evolution of the situation of young people in December



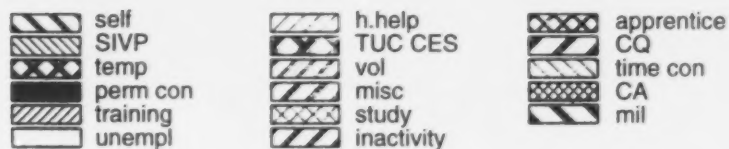
Overview: situation described under 5 headings
 Detailed: situation described under 18 headings

Chart 2

Comparative evolution of the situation of women in December



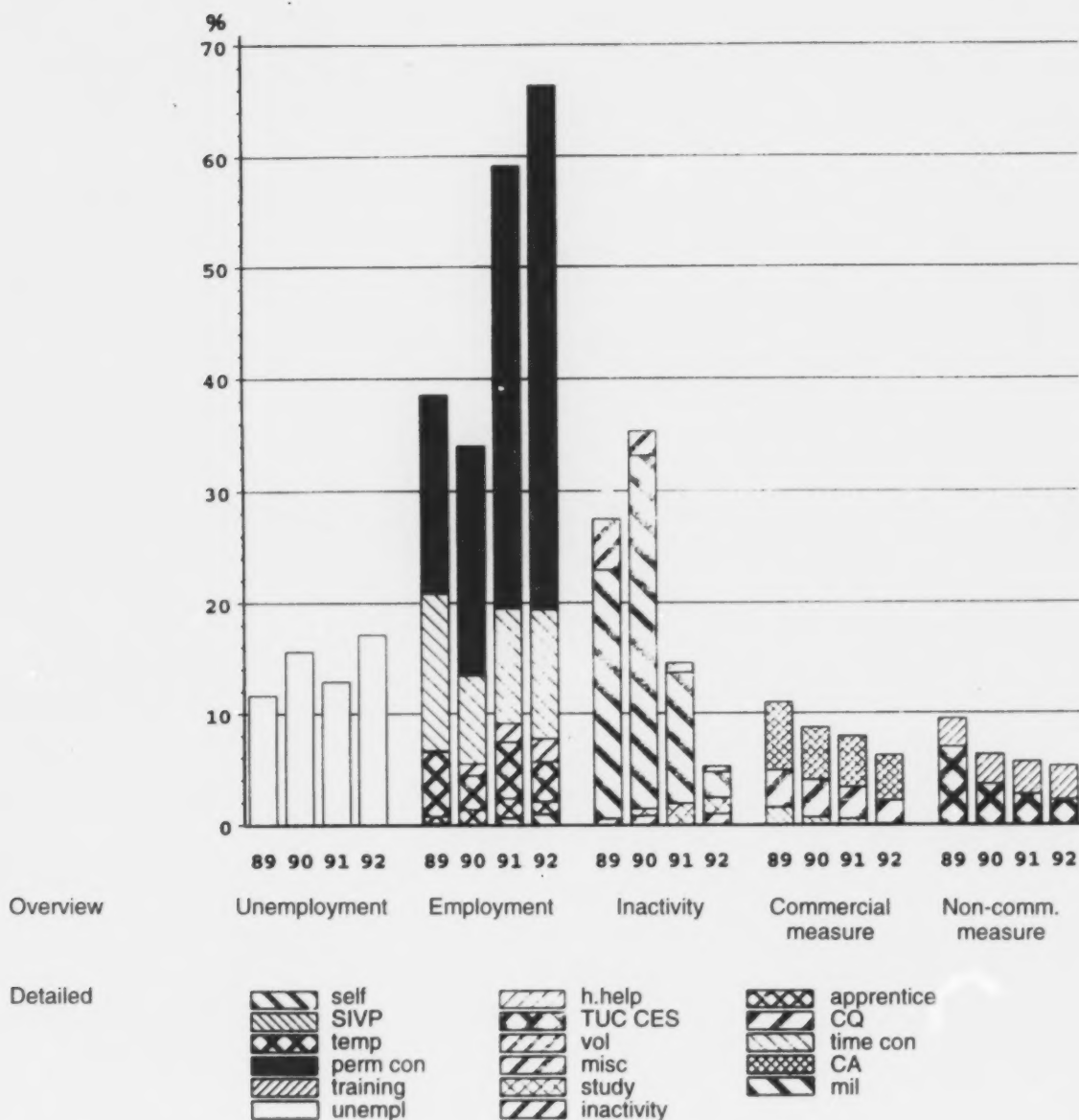
Detailed



Overview: situation described under 5 headings
Detailed: situation described under 18 headings

Chart 3

Comparative evolution of the situation of men in December



Overview: situation described under 5 headings
Detailed: situation described under 18 headings

Chart 4
Situations in detail according to sex

SITUATION	MEN				WOMEN			
	Dec. 89	Dec. 90	Dec. 91	Dec. 92	Dec. 89	Dec. 90	Dec. 91	Dec. 92
Self-employed	0.1	0.1	0.6	0.9	0.0	0.1	0.1	0.8
Household help	0.1	0.0	0.1	0.1	0.3	0.1	0.6	0.2
Apprentice	0.6	1.3	1.7	1.1	0.3	0.3	0.8	0.1
SIVP	1.6	0.6	0.5	0.1	1.1	0.4	0.2	0.0
CES - TUC	6.9	3.6	2.7	2.2	29.1	18.9	15.4	6.7
Qualification contract (CQ)	3.3	3.3	2.8	2.0	2.4	3.0	3.0	2.1
Temporary	5.7	3.1	5.0	3.5	2.2	1.6	2.3	1.1
Volunteer military service	0.1	1.1	1.7	2.1	0.2	0.1	0.4	0.3
Fixed contract	14.2	7.9	10.4	11.7	12.0	13.4	10.4	10.6
Permanent contract	17.7	20.6	39.6	47.0	12.0	21.0	34.4	38.4
Adaptation contract	6.2	4.7	4.6	4.0	3.4	4.2	2.8	2.7
Training course	2.6	2.7	2.9	3.0	3.2	5.0	4.9	4.6
Study	0.0	0.6	1.9	1.4	0.1	2.0	2.5	2.1
Military service	22.4	31.7	11.8	2.3	0.4	0.7	0.3	0.0
Unemployment	11.7	15.6	12.9	17.1	24.2	25.2	18.1	25.4
Inactivity	4.5	2.2	0.9	0.5	6.9	3.3	3.8	5.0
Miscellaneous	2.3	1.0	0.0	1.0	2.2	0.8	0.1	0.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: CEREQ - Observatoire EVA

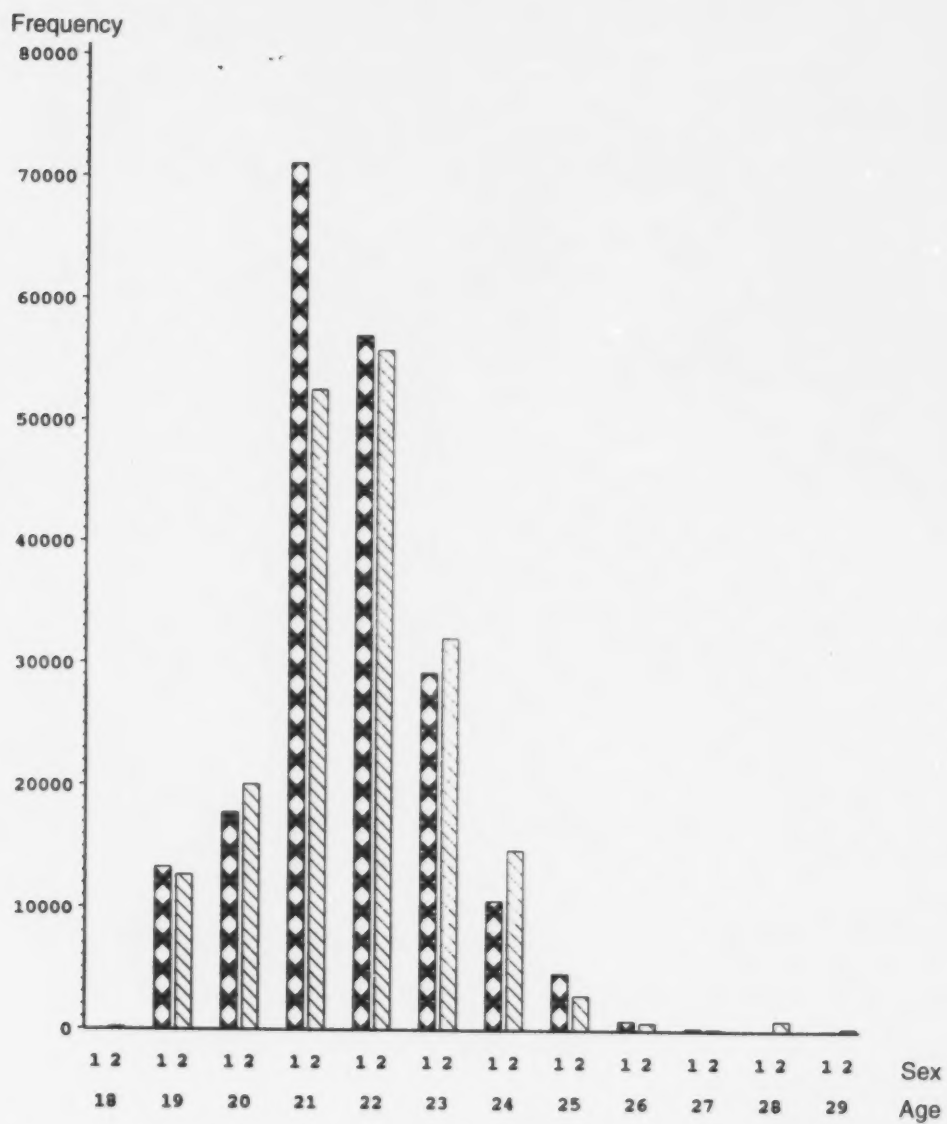
Chart 5
Rates of recourse to measures after 18, 30 and 42 months according to level, sex and training route

Comparison of '86 leavers and '89 leavers

Groups	Secondary school						Apprenticeship		SES	
	Girls			Boys			Girls	Boys	Girls	Boys
	IV	V	VI-V2	IV	V	VI-V2				
'86 leavers after 18 months	67.1	67.4	64.5	30.0	48.1	63.4	nd	nd	nd	nd
'86 leavers after 30 months	77.2	77.0	73.4	40.1	60.1	70.7	nd	nd	nd	nd
'89 leavers after 18 months	43.8	57.6	56.3	25.8	31.8	54.1	35.5	26.4	71.0	67.0
'89 leavers after 30 months	50.5	65.0	67.6	36.8	43.2	56.5	43.5	37.5	76.7	73.9
89 leavers after 42 months	55.2	69.6	73.2	43.6	51.1	60.0	49.7	41.4	84.1	80.6

Source: CEREQ - Observatoire EVA

Chart 6
Age according to sex in December 1992



1 = Men
 2 = Women

Chart 9
Duration of current unemployment spell for women in
December 1992

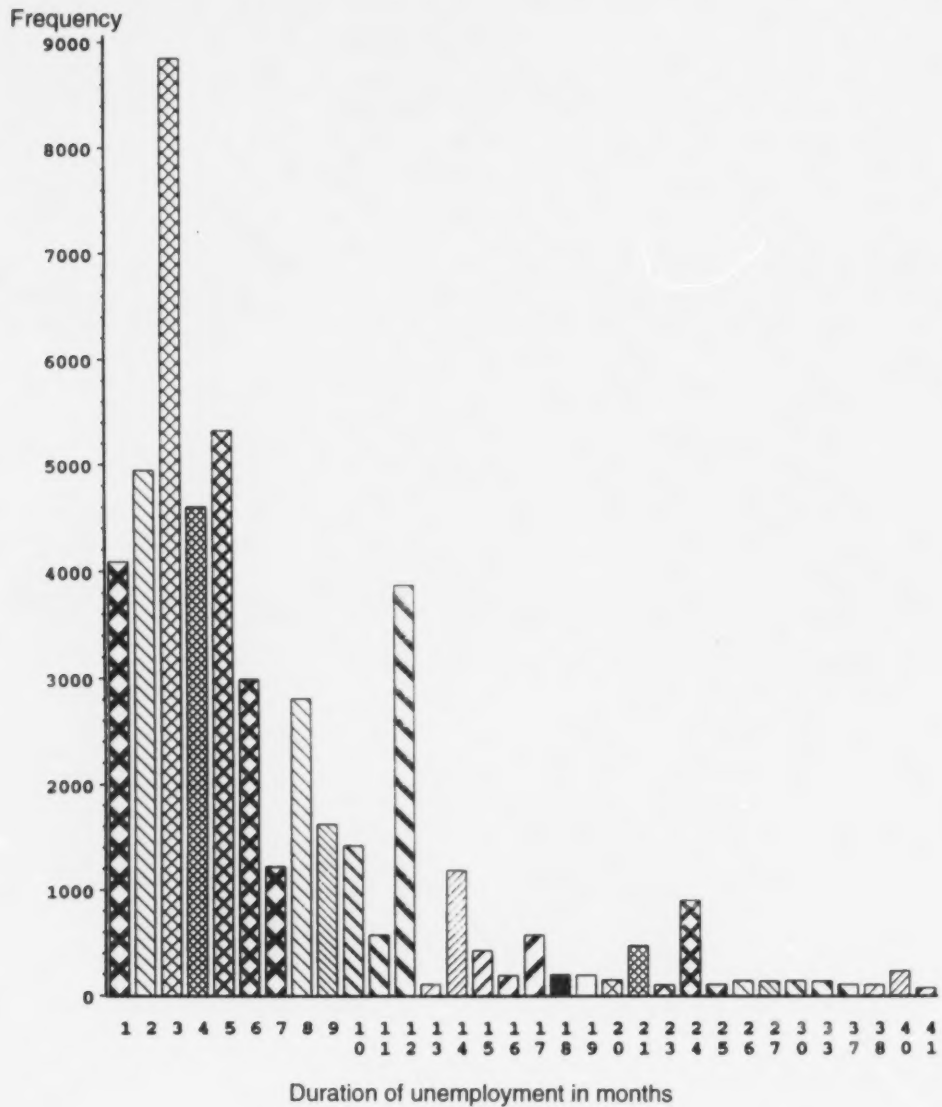


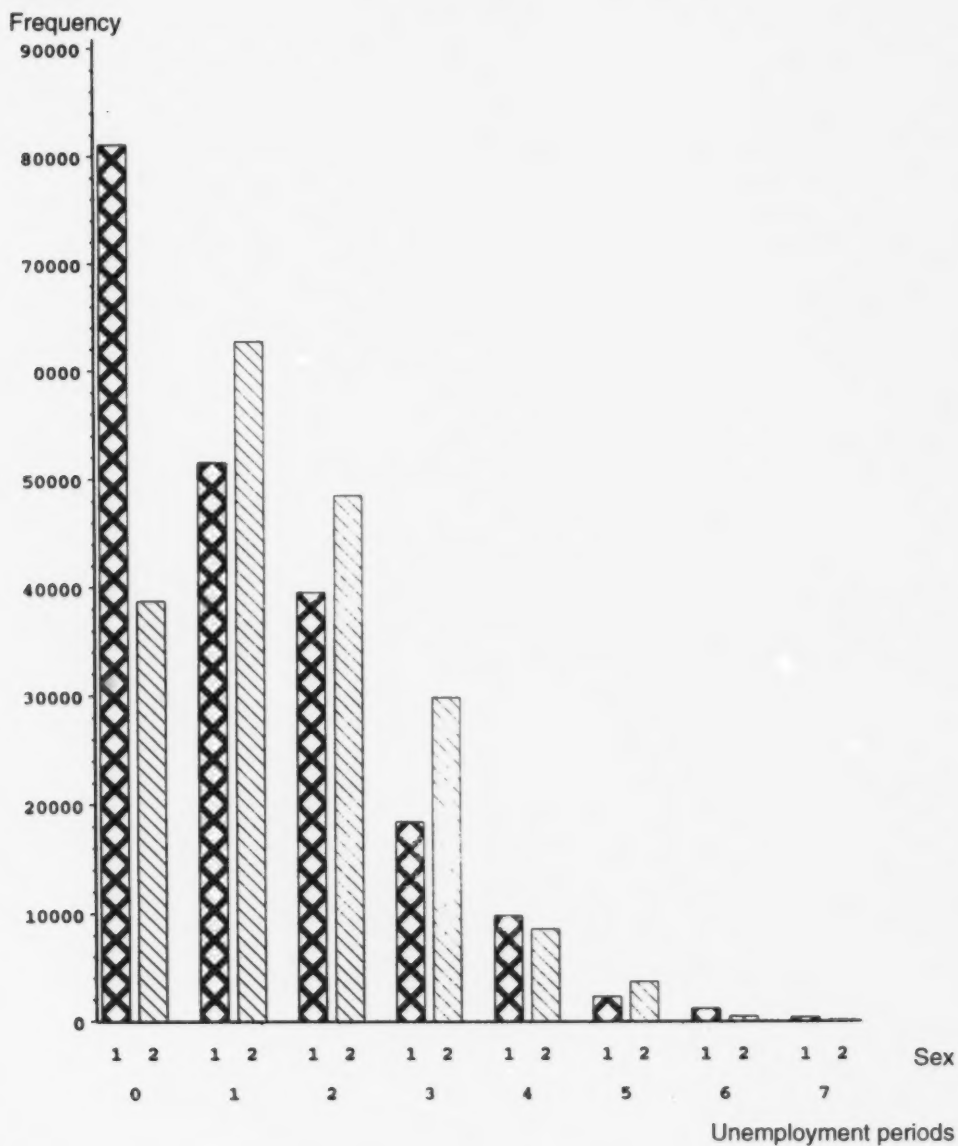
Chart 10

Duration of complete unemployment spell for women



Chart 7

Numbers of unemployment periods experienced according to sex



1 = Men
2 = Women

Chart 8
Duration of current unemployment spell for men in
December 1992

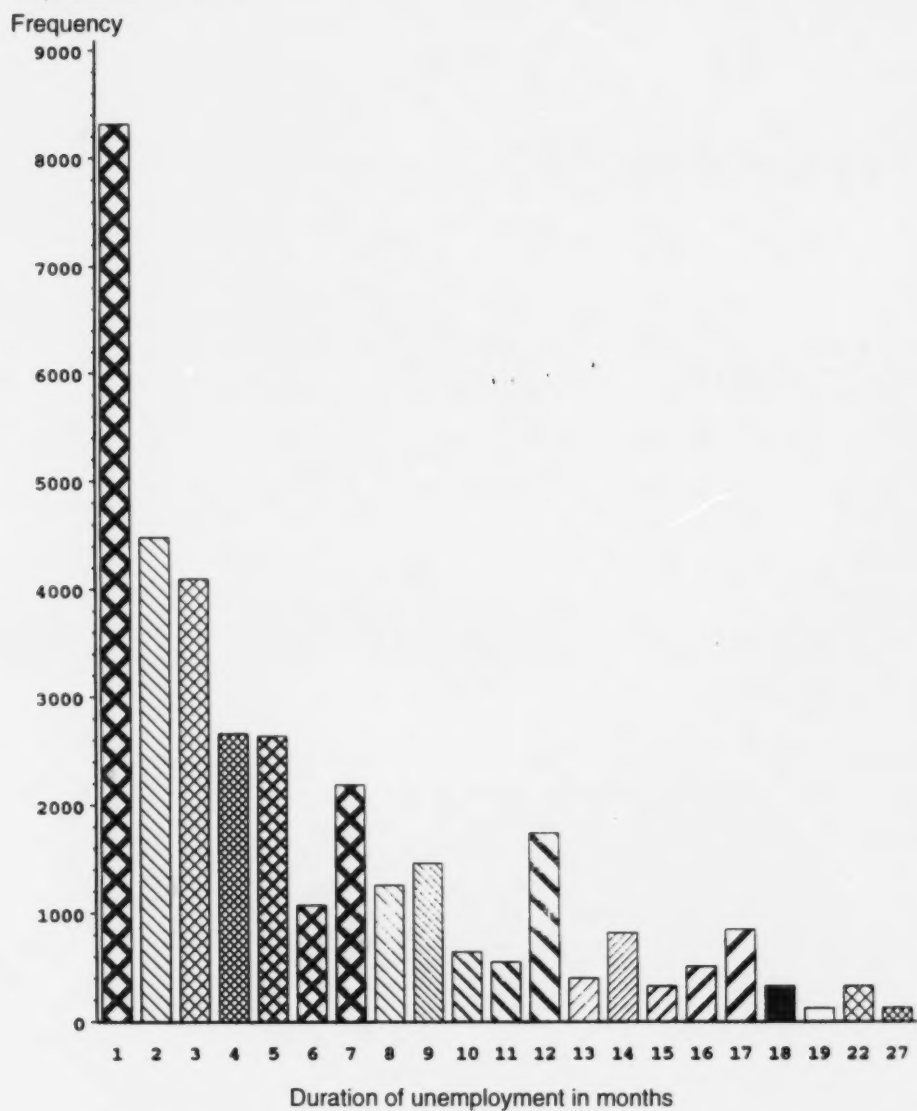
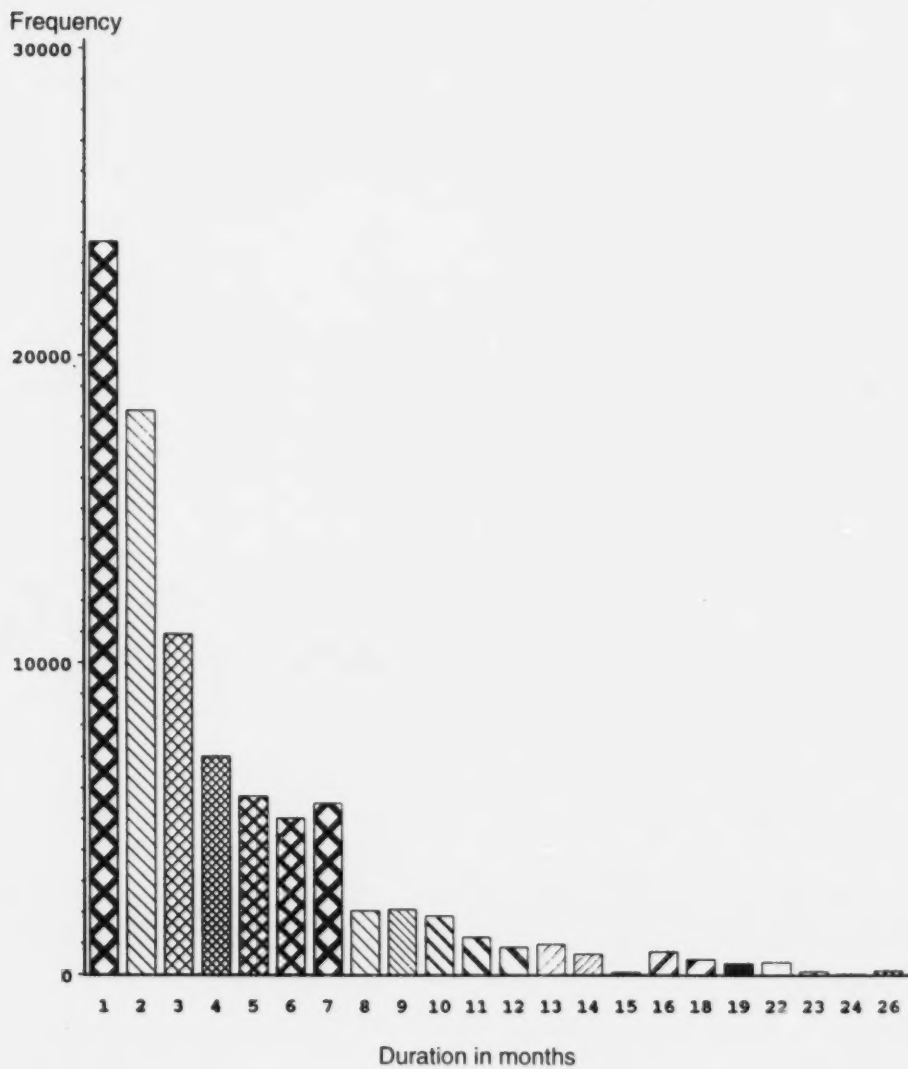


Chart 11
Duration of complete unemployment spell for men



Session 3

Transitions in youth: Social and household dimensions

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Summary report

I will first give a short summary of the three papers presented at this session and then make a few theoretical comments.

The paper by Annick Kieffer and Catherine Marry approaches the theme of the occupational and social mobility of females who entered the labour market and established a household during the 80s. They rightly criticize the literature on social mobility for having neglected the often invisible process of women's mobility. The starting point of their analysis is the interaction between occupational and family events, since, as they state, "the discontinuity of occupational activity and the absence of a career are strongly correlated to marital status and family events". The unit of analysis in mobility studies should therefore be the entire household. Since this is hardly feasible, attention should be placed on women's mobility patterns, at least in the first stage of a research strategy. This approach is justified, given a) the segmentation of the labour market along gender lines; b) the high degree of stability and rigidity in women's careers; and c) the frequency of discontinuities (entries and exits from the labour market, transitions from part-time to full-time work or vice versa, transitions from one sector to another, etc.).

Relevant variables are therefore: type of household (with parents, single, with partner, with or without children); level of education and/or vocational training; work situation; and, most important, women's plans, i.e., strategies to combine career plans and family plans. I cannot enter here into the methodological problems discussed in the paper; I will, however, underline some of the major trends the research was able to identify: an "explosive" increase in educational attainments at all levels; a parallel increase in employment ratios (in particular at higher educational levels); a decreasing number of non-employed young women.

To quote the authors: "The 'staying at home' alternative does in fact seem to have lost every legitimacy for the large majority of women in this generation".

Family background, educational attainment, occupational career and decisions concerning family life are strongly interdependent events. It is true that for less qualified women, life takes its course under the pressure of severe social constraints, but this fact does not exclude the possibility of individual strategies combining family and work plans. This last point is crucial and should be kept in mind when we try to arrive at some conclusions.

Walter Heinz's paper focuses on the interrelations between the two main dimensions of transition: education - work, parents' household - new family. Underlining the concept of "life course decisions", he suggests that one has to look at the interaction between institutional structures and individual behaviour. He asks several crucial questions: a) to what extent are pathways of transition from school to work institutionalized? b) how does the segmentation of the labour market influence the segmentation of the educational/training system? c) how does segmentation operate along gender lines? etc.

Heinz uses the concept of trajectory to point to the transitional paths from school to employment and to compare England and Germany. He suggests that "the process of labour market entry is linked in complex ways to trajectory and transition behaviour". Four types of transition behaviour are identified: 1) 'strategic' (clear-cut vocational choices and occupational goals); 2) 'step-by-step' (choices are reversible, occupational goals are not clearly defined); 3) 'taking chances' (choices towards demanding training or educational attainments); 4) 'wait-and-see' (no definite choices are made). The interplay between trajectories and transition

behaviour produces career patterns: progressive, upward, stagnant and downward or damaged.

The pathway from education/training to occupation is also the main concept used by Matti Vesa Valonen. There is a high degree of coincidence between trajectories (in Heinz's paper) and pathways (in Vesa Valonen's paper). Four pathways are identified: 'highers' (from secondary education to higher education to the upper segment of the labour market); 'polytechnics' (from secondary school to vocational education to technical occupations); 'experts' (from compulsory education to vocational training to the labour market); 'outsiders' (no further education after compulsory school). According to Vesa Valonen, becoming adult requires the ability to use one's own mind in public; he calls this process the texturing of reality and implies both activity (conceptualized as life-style) and reaction to reality. The combination of life-styles and types of reactions to reality are connected to the four pathways described above.

All three papers presented converge, in my view, on some theoretical dimensions:

1) Both the educational and the occupational systems (or settings) are structured, and this structuring produces segmentation (along gender, sectorial and territorial lines). Segmentation of the educational/training system is transferred to the occupational system but there is no automatic correspondence: the degree of correspondence/coherence between segmentation in the two systems can be high, medium or low. Individuals can follow highly institutionalized or hardly institutionalized transitional patterns.

2) Even if institutional settings and institutionalized pathways or trajectories from one setting to the other represent constraints for the individual, these constraints play different roles according to the life history of the person concerned (his or her social origin and the whole chain of life course decisions he/she has made during the previous stages of the life course in all life spheres). The concepts of "transition behaviour" (W. Heinz), of "texturing reality" (Vesa Valonen) and of "strategy to combine career plans and family plans" (Kieffer-Marry), all point to the existence of degrees of freedom of choice by the individuals concerned.

Individual behaviour and decisions can open up or close down opportunities, enlarge or restrict the number of options available. It should be kept in mind that each decision is but one in a chain of decisions (past but also future) which are mutually interdependent in ways which have to be determined.

3) Decisions, however, can also be non-decisions; individuals faced with options can be unable to choose or can delay choices to the future. The capacity to choose depends upon several individual factors (not unrelated to social status), like the capacity to defer gratification and the degree of self-confidence (dependent upon the outcome of previous decisions).

4) Using two sets of variables (degree of openness or closure of opportunities structure and high vs. low degree of capacity to make choices), it is possible to arrive at a typology quite similar to the one proposed by Heinz. 'Strategic' behaviour is defined by high capacity of choice and open opportunity structure; 'taking chances' by closed opportunity structure and high capacity for choice; 'wait-and-see' by open opportunity structure and low capacity for choice, and 'step-by-step' by closed opportunities and low capacity. This proposal tries to conceptualize how young men and women act within and upon a situation. In other words, we cannot restrict ourselves to the comparison of structures (educational, occupational or transitional); if we take behaviour into account, we have to find ways to conceptualize how individuals act in structured situations and, therefore, introduce the impact of cultural factors within a comparative framework.

Transition Behaviour and Career Outcomes in England and Germany

Introduction

The transition to adulthood is a complex social process that consists of two main dimensions:

- 1) the education/employment dimension which requires at least fulfilling the following tasks:
 - finishing school
 - passing vocational training or academic education
 - finding an entry job
 - stabilizing within the labour force.
- 2) the household/family dimension which involves
 - leaving the parental home
 - living together with a partner, with or without children
 - marriage
 - co-ordinating domestic and working life.

It is obvious that these transition tasks are interrelated - moving out presupposes either own income, parental or state subsidies - albeit not in an orderly progression. For example, many young skilled blue and white collar workers in Germany do not succeed in finding entry jobs adequate to their skill level (Stegmann/Kraft 1988). Or: more young people in their late twenties are living in their parental home than in a childless, two-job marriage, as single or in cohabitation at the end of the 1980s (Strohmeier 1993).

Because of the complex interrelationship between the transition dimensions, there are very few comparative studies that focus on structural and individual aspects at the same time. Our study - which was supported by the Anglo-German Foundation - (Bynner/Roberts 1991; Evans/Heinz 1993) looked at the transition behaviour of young people in the context of different institutional arrangements and labour market conditions in England and Germany. As our results suggest, there are differences in cultural assumptions and social practices concerning the ways in which young people should be prepared for adulthood and working life. These conceptions are related to both the institutional arrangements and individual orientations towards the transition to work.

The extension of youth and transitions to work

The transition to adulthood varies according to socio-economic and cultural contexts that define the opportunities for training and employment with short- and long-term consequences for a person's life course. Comparative research on the transition to employment has substantial significance, as industrial societies are transforming into a mix of manufacturing, service and high-tech economies that have to compete in the world market. Germany seems to have an edge in this competition because of its strong tradition of vocational education and training. By presenting results of a study on the school to work transition in England and Germany, I shall attempt to show the potential of comparative transition research for demonstrating the interaction between institutional structures and individual behaviour concerning labour market entry.

In most advanced industrialized service societies the transition from education to employment has increased by years, and a career based on a good education has become important for

the self-definition of men and women. This development is not only an effect of economic and political processes, but also a matter of human agency: individuals are constructing their own life course in ways that differ from one or two generations ago.

Today, the life course has become a complex sequence of status passages that have to be selected, organized and monitored by the individuals themselves. People have to conceive of themselves as "planning offices" concerning life course decisions. The life course is turning into individualized, more selective biographies, for which people become accountable. The new biographical challenge, according to Ulrich Beck (1992), is to select and revise pathway and life course decisions by using market opportunities, institutional provisions and social networks in a series of well calculated life course moves.

These observations sensitize transition researchers not to fall into the structuralist reproduction trap by assuming that individuals at career crossroads just have to apply their class habitus, i.e. an internalized apparatus of perceptions, evaluations and action rules. It is more realistic to assume that individuals adopt "step-by-step", "trial-and-error" or even "wait-and-see" strategies in order to cope with various requirements and contingencies of the transition to work.

There is evidence from recent cohort studies that compare high school graduates in the United States that there is not only an extension but also more disorder in the life course of young people between school and adulthood. Using data from the national longitudinal survey of the high school class of 1972, Rindfuss, Swicegood and Rosenfeld (1987) demonstrate that young men and women had sequences in their life courses that deviated from the expected pattern. There is enough reversibility and diversity of events and statuses in the educational and employment domain which indicates that looking only at the age of first entry into various adult roles and to the sequence of these entries will provide a superficial account of the actual transition processes.

This impact of individual action is underscored by Marlis Buchmann's (1989) secondary analysis of two US. high school cohorts in the 1960s and 1980s; entry into full adult status has become more complicated and delayed today. She argues that the increase of skills and knowledge required by a high-tech and service economy has led to more time spent in education which has produced less continuous transition histories of young Americans since the 1970s. Young people who do not enter college have to spend quite some time in casual jobs in the secondary segment of the labour market before obtaining stable employment. Here they are faced with low income, high risk of job discontinuity and unemployment. Their transition shows no institutionalized pathways either by training or work creation programmes or an apprenticeship.

Youth research in (West)Germany has also investigated the causes and consequences of an extension of the youth phase. These studies, however, are divided by a common theme that is treated either from a post-modern perspective or one of a reproduction of social inequality. The former approach is close to psychology, education and social work, the latter to social class and labour market theory, work and socialization processes. A favourite metaphor from the post-modern approach is the destructuralization and individualization of the youth phase (cf. Combe/Helsper 1991). The other approach does not trust speculative rhetoric and proposes an extension and pluralization of the transition from school to adulthood (cf. Heitmeyer/Olk 1990). In a recent case study on the new time tables of the youth phase, Fuchs et al (1991) conclude that the assumption of a destructuralization and individualization of youth was too general to account for the interrelationships between transition patterns and the self-concepts of young people. Another recent study has compared the life concepts of young adults and found that most of them entertain a work-centred life concept. They are oriented towards meaningful work that should not interfere with private life; only a small minority subscribes to a leisure-and-fun conception of life (Baethge et al 1988).

This contrasts with youth research in **Great Britain** which conceptualizes the transition to adulthood either from the perspective of the reproduction of culture (cf. Willis 1978) or the reproduction of social and gender inequality (cf. Banks et al 1992; Allatt and Yeandle 1992). These studies tend to ask why educational and social disadvantage is concentrated in groups defined by class, race or gender in particular British regions.

Transparency and permeability of transition structures

If one wants to compare the status passages from school to work, it is useful to have criteria that show how education and employment are related. In addition to different opportunity structures which young people are confronted with in their transitions to the labour market, institutional arrangements that support the progression to adult status differ (cf. for USA compared to Germany: Hamilton/Hurrelmann 1993).

In contrast to transition processes in USA and England, there is a well organized period for skill development between school and full-time employment in Germany. This institutional arrangement, called the "apprenticeship", structures the movement towards adulthood for young women and men who do not go on to higher education (cf. Hamilton 1990). The process of vocational education and training (VET) is formally organized in about 420 occupations which cover most of the blue and white-collar jobs that do not require college or university training. An apprenticeship lasts three years and combines firm-based training and state-led vocational schools in a "dual system". VET is completed with practical and theoretical examinations, it confers job titles of journeyman, skilled blue-collar worker, or skilled white-collar worker. Despite a declining number of applicants, the majority of Germany's young people still moves through this training and socializing system which is accepted all over Germany. VET was, by the way, quite similar in East Germany, both training systems have common roots in the cultural tradition of how young people should be trained for work.

Apprenticeships vary in the quality of technical, organizational and social contexts. An apprentice can be trained in a small craft shop with a master craftsman and one apprentice, or in the training workshop of Mercedes Benz, for example, with many apprentices in different trades. Thus, the scope for skill development, work experiences, self-determination, responsibility and social communication is quite variable. Furthermore, the German apprenticeship system is highly segmented along gender lines. Girls normally - there are exceptions to the rule - have access only to a small range of female occupations such as hairdresser, sales person, or office clerk with low pay and bad employment prospects. After their apprenticeship some of them are faced with a marginalized labour market position and end up in a sequence of unemployment, temporary jobs and domestic commitments.

Currently, about 60 % of all German school-leavers between the ages of 16 and 20 enter an apprenticeship. This is because this system provides occupational skills, knowledge, work norms and credentials. In times of high unemployment, even a dead-end apprenticeship can become an entrance ticket to employment on a lower skill level. Finishing an apprenticeship is a stepping stone for entering the employment system, like a renewable ticket that can be re-used as one progresses in occupational life.

Furthermore, the apprenticeship system is supported by the employers and their organizations for two main reasons: it supplies rather inexpensive junior workers for at least three years. This is mainly relevant for small craft shops, beauty saloons and restaurants. More importantly, employers can mould or socialize and select their future employees according to company standards, without being obliged to take on every apprentice after examination. The socialization dimension of an apprenticeship is also honoured in a variety of semi-skilled jobs that might eventually put one into the core labour force of a large company.

According to Hamilton and Hurrelmann (1993), Germany's transition system is more transparent than permeable, however, it does not operate in a mechanical way. Rather, it is a product of negotiations between educators, employers, government and unions in a process of conflict resolution concerning educational values, economic competition in the world market, technological progress and funding. One of the reasons why the apprenticeship has not only survived technological change but has been internally reformed is this negotiation approach.

The transition arrangements also contribute to the reproduction of social class, ethnic and gender segmentation. Firstly, it separates the working class from the educated professional class. Second, it creates a hierarchy between white and blue-collar jobs and male and female occupations. The dual system is more flexible in responding to changes in the qualification structure than contributing to equal opportunities. Permeability between vocational training and higher education, for instance, is possible - but only with extra individual efforts.

We do not find an organized transition system from school to work in England. Most of the young people leave school at the age of 16 and look for employment combined with on-the-job training. In the 1980s, England experimented with one- or two-year Youth Training

Schemes (YTS) to provide some sort of school- or firm-based training for potentially employed youngsters. These programmes have been discontinued because they were not accepted by either the young or the business world.

Transitions and careers in England and Germany

I shall now illustrate the suggested interrelation between institutional arrangements and transitions with results from a study that compares transitions, careers and destinations of young people in England and Germany (Bynner/Roberts 1991; Evans/Heinz 1993).

We studied the transition from school to work in two British and two German labour markets between 1988 and 1992: in two cities with high youth unemployment: Liverpool and Bremen, and in two cities with relatively low unemployment: Swindon and Paderborn. We compared the experiences of school-leavers who were travelling along four different trajectories or transition paths from school to employment. The focus was on the relationship between structural conditions of qualification and employment, vocational orientations, skills and life plans of young persons. The four trajectories were distinguished according to the level of education and/or vocational preparation and employment opportunities. In order to compare across societies, we identified equivalent features of school-to-work tracks in the four regions: trajectory I was defined as the academic route in both countries. Trajectory II consisted of apprenticeship in Germany and entering career jobs in England. Trajectory III comprised semi-skilled jobs and youth training schemes and, in Germany, state-supported vocational education. In Trajectory IV we find unskilled jobs, casual jobs or unemployment/underemployment (see Figure 1).

Figure 1 Trajectories Defined

	England	Germany
Trajectory I	two A-levels	Abitur
Trajectory II	firm-based YTS, full-time vocational training, career jobs	apprenticeship
Trajectory III	non-firm YTS, pre-vocational courses semi-skilled jobs	vocational training schemes full-time vocational school
Trajectory IV	unemployment, unskilled jobs	short-term pre-vocational courses, unemployment

We use "trajectory" as a heuristic concept for categorizing routes to work in ways that were comparable between England and Germany. Our approach provides us with a context, consisting of a combination of education, training and labour market opportunities, for comparing the transitions within and between the selected labour market regions in both societies. Moreover, we have a typology of segmented routes to employment that can be used as a frame of reference to understand the variety of transition biographies.

In the second stage of our study which was completed in 1992, our respondents were asked to reflect on their transition experiences by looking back on influences and events since they left school. In this way we have been able to check the different pathways against interpretations of where the young people think they are coming from, going to and how they make sense of their transition experiences.

Before discussing the main results, a short **methodological note**. We selected our respondents as a sub-sample of sixteen cases each (young men and women) in Liverpool and Bremen from the original sample of 320 which we had interviewed in the first stage of our study (cf. Bynner/

Roberts 1991). We cannot generalize our analysis of transition biographies on the basis of relatively few cases. But we think that our careful selection of cases with reference to trajectory and labour market, and our use of problem-centred interviewing (Witzel 1982), step-by-step and comparative analyses of interviews enable us to form a coherent picture of the ways young people perceive chances and risks and how they act to realize their occupational goals.

Our design introduces the following levels of analysis and comparison:

- nation as context;
- type of labour market;
- career trajectory;
- matched pairs of respondents.

The series of matches between labour markets, then trajectories, and finally individuals made it possible to compare differences between England and Germany, between labour markets within and between these countries, and between trajectory/career outcomes on the individual level.

The combination of standardized and open interviewing provided data of quantitative and qualitative significance. For this paper, qualitative data from biographical interviews is used to discuss the relationships between transition behaviour and career patterns.

We have found that the process of labour market entry is linked in complex ways to trajectory and transition behaviour. As our analysis demonstrates, there is a reciprocal relationship between education and training arrangements, employment opportunities and transition biographies.

The formalized and publicly regulated transition patterns in Germany offer more options for individualized pathways especially for males and prevent an early exclusion of young people who are in Trajectories III or IV or who defer entry to the labour force. The latter applies especially to young people who come from Trajectory I or II. Young women are still squeezed into a gendered transition system. In each track they are channelled into feminine career patterns. They tend to anticipate compromises between (part-time) employment and domestic responsibilities. It seems as if they tend towards "stagnant careers" even if they have acquired occupational qualifications and credentials.

Our analysis has also generated theoretical constructions concerning the relationships between transition behaviour, as an important part of the young people's personal histories, and career outcomes. By "**transition behaviour**" we mean the patterns of activity young people adopt in attempting to realize their personal interests and occupational goals within social requirements and structural opportunities - a central dimension of biographical construction. It is a more or less adequate set of solutions to problems that start with educational achievement, vocational choice, looking for a training place, applying for a job and qualifying for promotion. Transition behaviour is relatively stable but it should not be equated with psychological concepts like personal flexibility or rigidity. The specific type of transition behaviour may change in response to failing to achieve the intended result at any stage of the process.

There is evidence for distinguishing the following transition behaviours, i.e., activity patterns that young people have adopted when moving along trajectories into the labour market:

1. **Strategic** transition behaviour: it is planned, linked to a clear cut vocational choice and to definite occupational goals. We have found this transition behaviour among young people who were in Trajectory I, II and III (in order of relative importance).
2. **Step-by-step** transition behaviour: vocational choice is not definitive, it is a process of searching for an interesting occupation; the one taken up is not usually tied to a definite occupational goal. We have found this transition behaviour mainly among young people who are in Trajectory II and I.
3. **Taking chances** transition behaviour: this consists of job-related activities that are characterized by finding out about one's interests either by confronting oneself with demanding training or educational processes, or by following a specific aptitude. We found this transition behaviour among young people from all four trajectories.

4. **Wait-and-see** transition behaviour: this is characterized by an attitude of "learned helplessness", one is happy if the situation gets no worse; there is the dim hope that there will be a lucky moment in the future. It is mainly young people from Trajectory IV and some from Trajectory III who look back to a transition history that is marked by disappointments and failures.

We see that the extent to which young people have succeeded in developing long-term occupational goals not only depends on their past socialization in family and school-life, but to a large degree on the way their identity formation was influenced by challenges and rewarding experience or stress and failure in the passage to employment itself. It makes a big difference whether a young person embarks on this risky voyage in a clearly defined progression of qualifications, based on his or her decisions, or in a diffuse, short-term arrangement which is reactive to training opportunities or immediate job demands. Self-confidence in youth arises out of success in completion of transition tasks, from vocational choice to labour market entry, and in coming to terms with changing work structures in personal decision making. The 'strategic' and the 'taking chances' approach to transition are expressions of a kind of **active individualization**. There is a more passive kind of transition in which the young person is carried along in socially accepted or sponsored patterns, without a sense of an ultimate goal or overall direction. A lack of material and social resources acts against risk-taking which could result in career 'damage'. Transition behaviour which is characterized by a 'step-by-step' or a 'wait-and-see' pattern can be seen as an expression of experiences that did not enhance self-confidence but exposed young people to social forces of exclusion.

We find that transition behaviours and life plans do cut across trajectories and do not necessarily comply with the expectations of parents or employers. As our first study has demonstrated, the timing of transition is dependent upon the available jobs and the cultural norms about transitions, which influence the decisions of young people.

There are remarkable differences in this respect between England and Germany. In England, parents and youth see early transition to an independent employment status as most desirable. Extended vocational training and academic education are also seen in terms of quick accession to the desired occupational status and the economic independence that goes with it. Many young people, especially from working class backgrounds, meet training schemes which are 'in lieu of work' with reluctance or even distrust, because they fear that their expected independence will be curtailed. Furthermore, they are looking for other sources of identity stabilization - that may be independent of the transition to employment - when they fail to accomplish entry to work status. This may be achieved, for instance, by setting up one's own household, getting married or early parenthood. This was more often the case in our Liverpool sample, mainly among young women who were stuck in a stagnant career. Our results are supported by Claire Wallace's study (1987), who has found that girls in England who have experienced unemployment and casual jobs develop lower expectations concerning career goals. In contrast, young women spend more time in education, vocational schools and training in West Germany. While some have argued that this supports the development of a more independent transition behaviour, our evidence shows that young women tend to adopt step-by-step behaviour. Their transition remains restricted by traditional assumptions, and reproduces gender roles.

We see that the process of becoming an adult in Germany is more protracted, where the duration of VET (3 years) and higher education (7 years) defines the timing of transitions. This means that the majority of the young generation serves an apprenticeship or pursues academic studies without feeling socially dependent. Instead, they have a socially recognized role as an apprentice or as a student. The minority of young people who are excluded from the vocational or the academic trajectory because of educational failure, social background or labour-market bottlenecks are channelled into training schemes or are stuck with casual jobs. They have the difficult problem of legitimizing their social status, because they cannot rely on an institutionalized 'pacing' of their transition. Thus, they are in a situation where transition behaviour may be reduced to 'wait-and-see'.

By contrast, young people in England are treated as adults at 16, whether in post-16 educational institutions, training schemes or in the labour market. The suggestion that the less institutional English framework might encourage reactive transition behaviour proved to be an over-simplification. 'Step-by-stop' emerged as a common transition behaviour in both countries. In England, 'step-by-step' in the sense of flexible, ad hoc transition behaviour was necessary because of the fluid nature of the opportunities available. In Germany, 'step-by-step' was encouraged by the highly structured system which offered alternatives and a longer

time frame for decision making. In both countries relatively few young people had crystallized their occupational goals. Where they had, proactive strategies were encouraged by the German arrangements which set out clear and regulated pathways and criteria for achieving them. For those with clear occupational goals in England, the ways of achieving them were often less transparent, and 'step-by-step' was often, but not always, the response. "Taking chances" was also encouraged in both countries, but again in different ways. Some active exploration of options was possible within the institutionally supported transitions of Germany. In England, "taking chances" tended to be confined to young people who were interviewed in the buoyant labour market of Swindon. In both cases, recovery would be possible by virtue of institutional support in Germany and improvement of the local labour market in England.

We have found that transition behaviours are constructed from experiences with labour market conditions, institutional structures and the operation of social networks. The outcomes can be characterized as "**career patterns**", produced by the interplay of trajectory and transition behaviour. While there are affinities between the 'privileged' Trajectories I and II and continuous careers, and between disadvantaged the Trajectories III and IV and discontinuous careers, our longitudinal data suggested four distinct patterns:

1. **Progressive** career pattern: a continuous, institutionally predictable transition into employment. We have found this pattern mainly among people in Trajectories I and II.
2. **Upward drift** or **repair** career pattern: a transition process which is characterized by moving out of the predicted trajectory outcome by "taking chances", unfavourable educational or training conditions are made good. We have found this pattern among young people from all trajectories.
3. **Stagnant** career pattern: basic educational or training requirements and the first step into employment are completed, but there seems to be no occupational future direction or goal. We have found this career pattern among young people from Trajectory I and IV, there are, however, also some from Trajectory II.
4. **Downward** or **damaged** career pattern: here young people are locked in a vicious circle that has started with failure at school, casual jobs or disliked apprenticeships that were dropped. Such a transition biography leads to unemployment and social marginalization. This career pattern is characteristic for young persons from Trajectory III and IV.

I want to stress that career outcomes do not only depend on transition behaviours of young people but also on the institutional arrangements and labour market settings and social support available (see Figure 2). Changing structural conditions in the training system and the labour market (YTS and recession) in England; smaller cohort size at labour market entry and the unification of Germany in the FRG; and the reform of VET curricula in both countries have had an impact on young people's transition outcomes that they could not anticipate. Individual transition behaviour has to constantly readjust to new circumstances which in turn affect outcomes. For example, the current rise of unemployment in Germany has reduced the chances of finding a job after apprenticeship.

Conclusions

In Germany, the relationship between a cultural code which favours an extended process of learning together with training before labour market entry and the resources available for education and VET still seems to be strong. Despite recession and the increasing financial problems of the state, public opinion still demands that governments invest more in schools, universities and training programmes. England remains a long way from the organized process of vocational socialization which the German system offers. In the German system, institutionalized stepping stones are provided for career 'repair' even in Trajectories III and IV, because these provisions aim for social integration through participation in VET. In England, young people tend to depend on the family and other informal social support networks when faced with unemployment and expensive housing, whereas in Germany there is more public support combined with training schemes.

The impact of local and national contexts seems clearly related to the trajectories. Most affected by the labour market in both countries were young people in lower trajectories. Those in the academic track or with a promising apprenticeship could even chance testing the national labour market. Those without such prospects were limited to local employment

opportunities. This was particularly evident in England, where young people were not protected from the changes in the local labour market to the same extent as their German counterparts.

In considering the national context, we come to the central focus of our two investigations. In our first study we concluded that the English system of training was possibly more flexible or permeable than the German, which was characterized by a certain degree of rigidity (Bynner and Roberts 1991). This conclusion was derived in part from the answers given by young people to a range of attitudinal questions. Young English people tended to evaluate their training experiences more positively than their German counterparts, to express more self-confidence about their capacities and their prospects for the future, to be more willing to envisage moving elsewhere for a job and so on. Detailed examination of the career histories of young people, however, tends to suggest that such a conclusion was premature. In one or two instances, young German people in our sample might have done better in England.

However, one disadvantage of the German system is indeed the very restricted opportunities for entry-level jobs without a vocational certificate. One reason for this is that many such jobs - like stacking shelves in supermarkets or warehouses - are held by foreign workers. On the other hand, employers often expect employees to have finished some apprenticeship, however unskilled a job may be.

Apart from these few cases, one might suggest that the advantage lies with the German system when it comes to combining the extension of the youth phase with flexibility of training and employment systems. The key to this flexibility arises, in the first instance, from the transparency of the transition from school to work. This is perhaps more congruent with the pace of psycho-social development among young people. It permits moratoria, in the sense of extended training and education experiences, it enables false starts to be compensated, lack of qualifications to be made good, and simply more time to look around and experiment. It also arises from the greater significance attached to formal qualifications in the German system and the greater recognition accorded to VET institutions by employers. At first sight this does not seem like a feature of the system conducive to flexibility because young people seem to be tied to their respective trajectory. However, it means that young people are under less pressure to get a place in the labour market immediately after school. They can spend more time acquiring formal vocational qualifications knowing that these will be recognized by employers or that they will open an alternative route to higher education.

This is possible because of the wide range of educational institutions in Germany forming an integrated system for acquiring qualifications which can be used flexibly in the commercial and industrial world. In England, continuing education is seen by a significant proportion of the population as pointless if there are no jobs. Despite the increase in voluntary 'staying-on' routes, there will remain a core of young people who will leave the educational system despite very poor prospects outside it. They adopt a wait-and-see transition behaviour that leads, in combination with a less than successful education and labour market entry passage, to a downward drifting career. The German system, on the other hand, with its higher degree of regulation, offers better protection for young people. But, vicious circles also operate for those at the bottom end, which are more difficult to break out of the longer they continue. The system certainly helps some young people out of precarious circumstances, as our cases have illustrated.

For most cases in our sample, step-by-step transition behaviour led to progressive careers in Germany, while in England the same behaviour led to stagnant careers because of a lack of institutionalized stepping stones to training and employment. We also recorded that the losers in the transition to work, where wait-and-see behaviour had led to downward drift, were found mostly in the English sample.

The two systems are flexible in different ways. It does seem unsatisfactory to regard the German system as inflexible, for if anything it seems to provide more resources for individualized transition behaviour. Flexibility in Germany comes by combining the transparency of the education and training system with institutional permeability, as the personal histories sampled clearly demonstrate. Flexibility in England comes by 'playing the labour market' and informal support networks, the latter compensating for the former in times of recession and declining labour markets. It seems difficult to find an effective balance between a market-led and an education-driven model - in the design of a future VET fabric that would at the same time facilitate the acquisition of occupational skills and social knowledge, identity elaboration and flexible labour market participation (cf. Rosenbaum et al 1990). According to our results, preference should be given to a period of stable and basic VET over direct labour market

integration. The institutional fabric, together with life course notions, mould young people's transition behaviour, while the labour market determines the scope for constructing an individualized transition.

A central conclusion for vocational socialization research is that training and employment biographies and personal orientations towards education, work and career develop from the young people's experiences in different transition routes and depend less on family socialization and years of schooling. The transition structures of both countries reproduce basic cultural assumptions and institutional norms that define how young people reach adulthood by offering different options concerning duration and sequence of education, training and work.

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French women entering the labour process and setting up households in the 1980's

Introduction

Our purpose is to study the insertion and occupational mobility/immobility of young women in the course of the 1980s in relation with their "two families" (Herpin, 1990) - their family of origin and the family they themselves set (or do not set) up. Over and above educational and social origin determinants, their occupational routes, of which insertion constitutes a specific point, are in fact linked to the process of establishment and the form of this second family. Setting up a household (by means of cohabitation or marriage), loneliness following "decohabitation" (F. Godard, 1992) or prolonged residence within the family of origin, the choice of partner (degree of educational, social and occupational homogamy, (Bozon, 1991) and the arrival of one or several children may be interpreted as family strategies closely linked to the occupational strategies of one or another member of the household.

Occupational mobility, element of social mobility

Although our long-term objective is to study the occupational and social mobility of the entire household, we shall initially concentrate on that of women, in particular young women. This contribution is part of more extensive and long-term research with the aim of shedding light on the occupational and social mobility of young women, which can be qualified as invisible mobility. Until recently (from Sorokin to Thelot), sociologists have highlighted social structuring mechanisms and their reproduction and evolution on the basis of the mobility of the head of the household - in actual fact male mobility. Their line of argument is based on the low rate of salaried activity among women, the discontinuity of this activity, the strong links between the occupational activities of men and women among the self-employed and, finally, the high degree of homogamy observed. However consideration of the important development of salaried activity among women in recent decades, on the one hand, and finer research into marital practices and their relationship with social mobility (Vallet, 1992), on the other, show that it can no longer be assumed that male mobility is adequate and therefore relevant for the analysis of social mobility processes. Similarly, it can no longer be maintained, as advocated by Goldthorpe for a considerable length of time, that female mobility in no way modifies the results of the analysis of male mobility and therefore its relevance for the study of social mobility, in particular as a result of the high degree of homogamy. Following the debates in which he was in opposition to specialists of female sociology in the early 1980s, Goldthorpe admittedly took account of trends in female activity by picking up Erikson's indicators of the position of dominance (the highest position occupied by a member of the household) and work time (permitting differentiation between full-time and part-time). In any case, this assumption can no longer stand unchallenged. Work on mobility must now take account of the two members of the couple and how each of them constructs the relationship between training, family development and occupational career in a given society¹. Although it is not a question of social mobility in this context, it is nevertheless clear that work on occupational mobility, including studies on one of its segments, insertion, will gain by being integrated into the larger issue of social mobility.

Insertion, the beginning of the process of occupational mobility

Occupational insertion marks entry into social, occupational or family life; it means the end of a state of dependence (on the family of origin), and a process of material, if not social, independence. Study of the stages marking this process, interactions between occupational and family events thus make it possible to identify its role in the life of individuals and households. The work of CEREQ in France confirms the determining role of the initial years

of active life; as far as Germany is concerned, however, Blossfeld shows that they are a determining stage which must be placed within the context of occupational paths, i.e. in terms of duration, and Huinick highlights the relations between training level and the structure of routes.

Occupational mobility is linked to lifestyles

The discontinuity of occupational activity and the absence of a career among women are strongly correlated to marital and family events. Women's occupational mobility therefore assumes significance if one takes account of the events in other fields of social life. This meaning is not the same according to generation, level of training, women's individual plans concerning motherhood and the family, the economic context, country², etc....

We shall therefore attempt to highlight the interactions between the various types of (occupational and family) routes on the basis of observation of concomitance of events relating to training, employment, departure from the family of origin, becoming independent, forming a couple and, finally, births.

Mobility among young women, an "invisible" route

Why, since we advocate that these questions be approached at the level of the household, do we focus on young women without comparing them to their male counterparts? There are a number of reasons in favour of such a choice in the first stage of our project.

■ First of all, the occupational market for young women has a relative autonomy. It is characterized by a low level of competition with young men and by little real mixing, the labour market being relatively segregated along gender lines. Thus in 1990 women held 57.7% of jobs in the commercial tertiary sector, 52.8% in banking and assurance and 54.8% in commercial services, whereas 77.5% of commercial employees, 82.8% of service employees, 75.6% of administrative company employees and 62.4% of public service employees and officials were women. The proportion of women is growing within occupational categories as a whole, even in those in which they are already in a majority³. It should be pointed out that Sh. Dex also notes this low level of inter-gender occupational competition and the existence of female job markets, characterized by tertiary jobs, low wage levels and part-time work in the United Kingdom. Moreover, women tend to hold jobs previously occupied by women⁴. Catherine Marry's work on "atypical" female occupations shows that this phenomenon is nevertheless accompanied by the access of girls to positions hitherto occupied by men, in particular technician and engineering occupations. It therefore seems more appropriate to develop a study focusing on the competition between young women rather than contrasting men and women.

■ Furthermore, tables on occupational mobility among women are striking in their degree of stability and rigidity: women enter an occupation at a skill level (floor), remain there all their lives and return in the case of marital breakdown or following the departure of the last children. British researchers⁵ have demonstrated that the situation is more complex, in particular if occupational mobility is studied in relation to occupation, births, recourse to half-time work... Moreover, women are highly concentrated in tertiary jobs whose skill level and content are not as well defined in socio-occupational categories as worker categories. Chenu's work has helped break down this homogenous approach. We have therefore decided to only use the aggregates for those categories in which there is a limited number of women (e.g. among the self-employed), but finer levels for the categories in which women are concentrated, i.e. office jobs and intermediary categories.

■ Finally, Maruani points to the existence of a form of sociology specific to female employment (Maruani, 1992). Traditional indicators are not adequate to reflect female mobility. Female mobilities cannot be understood without the integration of labour market entries/exits (discontinuities), working time (full-time, part-time) and the sector of activity (commercial, non-commercial private, public sector). Part-time work is synonymous with female work, even if the concentration of women in civil service jobs camouflages this phenomenon (50% of women graduates employed in the public service work less than 35 hours, although half of them are counted as full-time workers, the others working for a given fraction of the statutory full-time. This is another type of part-time work, one chosen, the other can be defined as a constraint, according to Maruani). Female employment is therefore polarized and itself feeds a feminine employment sector: women's employment in fact creates jobs which can be qualified as "reproduction", creches, catering, etc..., jobs induced by the collectivization of domestic work largely catered for by the state.

In this context we specifically propose to study the following:

■ Factors impacting on good or bad routes among young women, relations with the type of household (early coupling, age at the birth of children, single parent families), according to their level of training (no certificate, certificate equivalent to/lower/higher than the baccalaureate), according to their work situation (employment and unemployment, entries and exits, the type and status of young women's activity), in terms of cumulation or co-occurrence. We shall also attempt to describe possible mobilities which are not clearly visible (a switch from part-time to full-time, from the private to the public sector);

■ and therefore to highlight women's plans with respect to work, i.e. the primacy of salaried employment or staying at home.

Given the low numbers of graduates of higher education (and better knowledge of their occupational destinies), it is of greater interest to focus our attention on those with no or a middle-level certificate (unqualified, certificate of vocational education, baccalaureate, 2 years of higher education). We shall ask which remain at work throughout the entire period and/or have experienced positive occupational mobility (typist to secretary, sales assistant to administrative employee, semi-skilled worker to skilled worker...) compared to those who go through unemployment and non-working activity. Can a relationship be observed with their type of household, a higher proportion of single or cohabiting women, spouses less qualified than themselves (educational hypogamy strategies observed by Chantal Nicole), fewer children? Can a relationship be observed with their family of origin (e.g. occupational status of the father: employed, unemployed, non-employed...)? Are the most "active" or the most "mobilized" (cf. Terrail, 1993) those in an upward route (unqualified father, e.g. among young women of Arab origin) or in "reproduction" (father with a certificate of vocational education or the baccalaureate)?

Methodology

We opted for a longitudinal method of data analysis, permitting the follow-up of a cohort, which seems to be the most appropriate for our purpose. Thus the birth of the third child is commonly related to a drop in occupational activity among women and interpreted as a link of cause and effect, whereas when individuals are followed, it often transpires that occupational activity was ceased before the birth of the first child. The longitudinal approach permits identification of how arbitrations between family plans and career plans are conducted. It is inadequate to systematically assume that the former have primacy over the latter, even in the case of under- or unskilled women.

Sample

We therefore followed a generation of young women aged 20-30 in 1982, and within this group the sub-group of the 20-22 year-olds, over several years, from 1982 to 1988, on the basis of employment surveys, taking account of co-occurrences of occupational events (measured by activity and occupation) and family events (type of household, position within the household, marital events, births) according to their own characteristics, measured by the level and type of initial training and social origin.

Ordinary households were selected as the observation unit. Young women thus form the "core" of the household, to which the other members (parents, brothers/sisters, spouse, children) are related. All the households with a young woman in this age bracket were therefore drawn from the employment surveys. The sample was differentiated according to whether the young women were still living with one or both of their parents, alone or as a single parent family, cohabiting with friends or family members, or had formed a couple, according to the presence and number of children. The work situation (employed, unemployed, non-employed) of the spouse was included in this indicator.

Follow-up of thirds of employment surveys: accommodation and household panels

Little use has so far been made of the series of employment surveys in work on occupational mobility. Although, unlike panels, they do not permit a follow-up of individuals throughout their occupational and social routes, they nevertheless present a considerable number of advantages:

- large sample size (the sample rate is approx. 1/300), permits work on the basis of sharply defined sub-groups, while at the same time retaining an acceptable and controllable margin of error;
- their periodicity - they are annual;
- their stability - they include a corpus of stable questions for an inter-census period to which a thematic module is added each year, including supplementary surveys on young people (1982 and 1992) and the 1989 careers survey directly concerned with the questions under analysis; this mode of organization provides additional information applied to our sub-group at a later stage;
- finally, their structure - the sample is renewed by one third every year which means that the same home is surveyed three times. This therefore provides a home panel over a period of three years. However this advantage is not absolutely commensurate with our objective, i.e. the follow-up of individuals and households, since only those who are not mobile or have moved into these homes are surveyed. It is therefore impossible to find out the reasons for departure or to plot concomitant events. We can nevertheless record the year of departure from the parental household and therefore identify a mobility.

Transversal surveys have a major advantage over panels the viability of their representativity at each survey. In the case of the employment surveys, minuses (in this case moves) are replaced by the new residents of the same homes who are asked a certain number of questions on their situation in the previous year. It is nevertheless evident that if it is assumed that a home is occupied by socially similar households, the home occupied by a girl in year t could be occupied by a boy in the year $t+1$ and the number of girls in a household is not dependent on the social level of that household. This is one of the practical problems of pseudo-panels for our purposes. There are abundant examples of the use of repeated surveys as pseudo-panels and their contributions have already been demonstrated (e.g. by Baudelot, Madre, Chenu...). As shown by J.L. Madre in his cyclical surveys among households, it is possible to treat these surveys, only a part of whose samples are renewed with each survey, as pseudo-panels established on the basis of panel sequences. At each point in time one has the same easily identifiable individuals, plus the newcomers entering the survey for the first time and surveyed at least once with respect to an additional memory-based reference point (the situation in the year $t-1$). One third of the employment survey sample was therefore "aged" - those corresponding to a home entering the survey during year t which were followed up over a period of three years, t , $t+1$, $t+2$). To test the effect of the pseudo-panel and the validity of this choice, it was decided to overlap the sequences so that the second third was studied in the year $t+2$ - $t+4$, the following from $t+4$ - $t+6$, etc... For each third the persons present at the three dates and those who left or entered a surveyed home were studied. We aged our group every year under the assumption that the population of our successive thirds was identical, i.e. that the individuals are interchangeable (with the reservation indicated above). This hypothesis was verified at each stage by comparison of the characteristics of those leaving and arriving between two dates and those of the departing and arriving thirds at the same date.

The purpose was to study the events marking the occupational insertion process of young women. This process could not be studied as a chain of successive and continuous events; the survey is conducted on an annual basis and does not cover all the events taking place between two surveys. It was therefore only possible to study discreet states resulting from the final events occurring in the period, separated by a constant interval (one year). So rather than a chain of events, we are dealing with a chain of states.

The follow-up of a group of the population over several years is an arduous task since it involves processing series of chains of interrelated (occupational, household situation) states. For this reason we preferred to limit the number of indicators and monitor their (re)construction for our purpose, in particular certificate, occupational and household indicators (briefly described above).

Schooling, family life and occupational life in the 1980s

Major trends

In the 1980s the trends initiated in the two previous decades in terms of the schooling, employment and family life of the generations entering adult life were prolonged and even accentuated. Women play a central role in these major trends, be it with reference to the "explosion" of grammar school and higher education students, the increase in the working and unemployed population, the tertiarization of the economy or the precarization of both occupational and marital relations (divorces, single parent families...)

The rate of access of a generation to the baccalaureate increased from 26.4% in 1980 to 30.2% in 1985 and 45% in 1990 (of which 28.3% for the general baccalaureate, 13.9% for the technological stream and 2.8% for the vocational baccalaureate in 1990) (Tanguy, 1991). This means that the young people entering the labour market in the late 1980s have in general received a much higher level of training. There is a slight decline in the proportion of those leaving school with no certificate (15.4% in 1980, 13.1 in 1989), but a higher number of those leaving more recently have at least commenced training (Audier, 1993). This progression is particularly strong among young women whose educational success has improved as compared to that of young men in all social milieux (Baudelot, Estabiet, 1991), and in particular in the most disadvantaged milieux (Terrail, 1992). A higher number of those going on to "long-term" higher education tend to enter the more selective streams of higher education, elitist universities (commerce and engineering) and use their degrees on the job market and no longer only on the marriage market (Marry, 1989). Despite these trends towards a reduction of educational inequalities between the sexes, there is still a high degree of segregation according to discipline. Sciences and technology remain the male preserve, whereas literary and "tertiary" streams leading to occupations in teaching, the health sector or social work are the female domain. Moreover, whereas there are more girls leaving the baccalaureate and two-year higher education streams (BTS and DUT), there are more young men leaving the levels at both extremes - short-term vocational training (CAP, BEP) and longer higher education (degree, M.A. or elitist university programmes). However it must be noted that nursing and social worker diplomas remain classified at level III (baccalaureate + 2 years of higher education), whereas in fact three years of post-baccalaureate study are now required for these professions.

This remarkable progression of education among women is reflected in an increase in employment rates. Despite rising unemployment, female employment continued to develop at a regular pace, scarcely below the rate observed in the 1970s, throughout the 1980s. Within ten years the proportion of women aged 25-49 with a job or seeking employment rose from 68% to 76%. This development is negative among the 20-24 age bracket on account of their prolongation of studies with a drop from 67.1% in 1982 to 59.9% in 1990. In contrast, the proportion of working women in the 25-29 age bracket which stood at 71.1% in 1982 had reached a level close to that among men of the same age in 1990 (80.5% compared to 93.5% among men) (Source: INSEE population census, no. 149, June 1991). It should nevertheless be pointed out that transfers from a labour market situation (particularly unemployment) to non-employment are particularly frequent in the 20-24 age bracket (6%), edging off with increasing age (5% among 25-29 and 30-34 year-olds, 3% among 35+) (Desplanques, 1993, p. 26). These hesitant or chaotic employment routes are above all found among women most devoid of educational (the unqualified) and social (daughters of unemployed parents) capital who have often become mothers at an early age. Motherhood impedes insertion and sometimes means failure to register as unemployed (Herpin, 1990, p. 79). As a number of studies have shown, a specific transmission takes place between mothers and daughters with respect to labour situation (Chaudron, 1984, Vallet, 1992). Whereas a father's exclusion from occupational life (unemployment, illness, death) has an impact on the unemployment of both sons and daughters, the same phenomenon among mothers seems only to have a negative influence on daughters: at the age of 25-26, the rate of unemployment among daughters of unemployed mothers is three times higher than that among daughters whose mothers go out to work (27% compared to 11%) and the number of non-employed daughters ("at home") is twice as high among those whose mothers have never gone out to work (24% compared to 12%) (see tables 1 and 2 from the young people's survey supplementing the 1986 employment survey, Marry, 1992, p. 319). All the surveys have substantiated the correlation between the level of certificate and activity: the most highly skilled women are the most active on the labour market, the last to have their first child, continue working following childbirth and are best protected from unemployment.

However this relationship between qualifications and working activity is not lineary and does not offer a full explanation of the continued increase in the working activity of women despite the crisis. On the one hand, attachment to working activity runs through the entire female population, the gap between women in continuous employment and non-employed women being above all a gap between those who have absolutely no qualification at all and those with some kind of educational certificate. A 20-point gap can be observed between the rates of working activity of 20-24 year-old women with a certificate of higher (98%) or technical education (BEP) (95%) and those with no certificate (75%); this gap reaches 30 points among 30-34 year-olds. On the other hand, a qualitative and quantitative study on a group of young women (and young men) aged 30 in 1990 (Nicole-Drancourt, 1992) shows major differences in the labour situation of those young women whose level of training is relatively homogeneous and relatively low (baccalaureate or lower): some have always remained in working activity (alternating between employment and unemployment); Others, fewer in number, have become non-employed ("at home"). The "staying at home" alternative does in fact seem to have lost every legitimacy for the large majority of women in this generation.

Trends also show a considerable expansion of already pink colour tertiary jobs: jobs in the commercial (services to companies and individuals) and non-commercial sectors (health, teaching,...). The increasing working activity of qualified women in the latter sector feeds the development of jobs in fields such as child minding and catering (Lefaucheur, 1992). A certain degree of polarization of employment and the forms of employment among women can thus be observed: on the one hand, those working in skilled and steady employment - in particular as public sector employees and managers or in the liberal professions (chemists, doctors...) where "full"-time (often 35 hours or less) is the rule and part- or "reduced" time facilitates reconciliation between family and working life - and, on the other, women in underskilled jobs subject to flexible working hours, often involving part-time, whereby so-called "atypical" working hours are frequently imposed (trade, catering).

Those aged 20-30 in 1982: general cohort characteristics and trends

The "training-employment balance sheets" (see graph 1) - a combination of data from INSEE employment surveys, Ministry of National Education surveys among those leaving the educational system and CEREQ insertion surveys - show a decline in those leaving at level V (certificate of vocational education) and lower levels (VI and Va) and an increase in those leaving at the baccalaureate level (IV) in the 1980s⁶. However levels V remain largely predominant. These balance-sheets show the flows of those leaving the educational system per level of training. Our approach differs essentially: we follow an age cohort composed of young women leaving the education system in different years. Not all the girls have left the education system in 1982, some of the youngest remain within the system and are only awarded their final certificates in the course of the period under review. The internal composition of the cohort in terms of training thus develops over time towards a rise in of the average level (see table in the annex). It should be noted that this rise (in particular at baccalaureate and long-term higher education levels) is accompanied by a reduction in the proportion of the unqualified, but has no impact on the certificate of vocational education or baccalaureate + 2 years of further education levels⁷, which remain very stable. In 1988 those leaving with a certificate of vocational education are more numerous than the unqualified, these two categories nevertheless accounting for two thirds of the cohort.

Working activity among women has risen since the beginning of the period, with the proportion of the non-employed stabilizing from 1984 onwards (see table in the annex). The choice of working activity/non-employment seems to take place at an early age among the young women in this generation: 13% of those aged 20-22 in 1982 are non-employed at this date, 20% two years later, with this proportion remaining stable in 1988. 69% of this same sub-group are at work in 1982 and this rate rises to 77.5% in 1988. The model of working activity is from then on the clearly dominant model among young women. The high rate of unemployment among the youngest members of this cohort (14% of the 20-22 year-olds in 1982) is evidence of this choice and at the same time expresses difficulties in the functioning of the job market. It falls substantially as the cohort grows older. Completion of long-term higher education (demonstrated here by the decline in the proportion of students) tends to lead to a rise in working activity rather than an increase in those staying at home.

Departure from the family of origin has largely commenced in 1982 within the 20-30 age bracket, the process being concluded in 1986, probably before the age of 25 as shown by the data on the sub-group of 20-22 year-olds in 1982. Setting up a household also takes place before this age, following a transitional phase of independence for some of the women. At the age of 24-26, more than one half of the cohort have at least one child. The stability of the

proportion of independent women is explained not only by maintenance in this state, but also by a return to this state following separation or divorce. The age of 25 therefore seems to mark a turning point or, to be more precise, the end of a process which in fact takes place at different ages, in particular according to training categories and milieux of origin, coined "de-cohabitation" by Godard, and the entry of an age bracket into adult life.

The women at work in 1982 are found in low- or middle-skilled jobs in the commercial and non-commercial tertiary and industrial sectors: many of them are found in public employment, 16.4% are public sector employees, 9 secretaries and 12.5% semi-skilled workers. This is a cohort effect, the more highly skilled not yet having entered the labour market. However 8% of the women already hold intermediate occupations in the health sector. Four years later, the proportion of semi-skilled workers and sales assistants remains identical, whereas the increase in the weight of teachers and health personnel (intermediary occupations) is reflected by a slight drop in that of the various employee occupations. However these developments are recorded in section and we have not yet looked at the trends of the different sequences of the panels of individuals which would offer a better follow-up of transfers from one occupation to another or departures from working activity which may be more frequent in certain occupations (presumably the lesser skilled) than others. Of the 20-22 year-olds in employment, the most frequent occupations in 1982 are semi-skilled worker (15.5%), secretary (10%) and public employee (16%), with a high incidence of precarious employment. Four years later, intermediary health occupations represent 10%, accountants 7.6%, whereas there is a slight decline in the number of semi-skilled workers, public sector employees and secretaries. Note the weakness and stability of industrial occupations: e.g. in 1986 only 4% of the 26-28 year-old women are skilled workers and only 1.4% technicians (1.6% of the 26-36 year-olds in the same year).

Occupational mobility and setting up a household

Whereas women living with their parents are in a majority among the actively employed (55% in 1982 within the decennial cohort, 63% in 1984 and 71% in 1986), the proportion of students is higher than in the other household categories in which the girls are living (1/4) and the proportion of the non-employed remains very low. Independent young women are characterized by high levels of employment (75% in 1982, 79.6% in 1986). Non-working activity is essentially found among women living within couples and is particularly characteristic of mothers with two or three children (30.3% of mothers of two and 56.8% of mothers of three).

The time of choice for everyone?

Staying with one's family of origin is particularly linked to level of certificate, and therefore social milieu of origin: certificate of vocational education holders, along with baccalaureate holders (approx. 14% in 1982) are the most likely to stay at home. Graduates of higher education tend to leave the parental family at an early stage (only 6.7% of short-term and 8.7% of long-term higher education graduates live with their parents in 1982), whereas 11% of the unqualified aged 20-30 (and 27% of the 20-22 year-olds) still live at home with their parents, although they enter the job market earlier. The unqualified leave their families to live in couples (71%), rarely to set up an independent household (6.5%), and a considerable number of them have children (59%: 44% are mothers of two and 15% mothers of three). This behaviour is amplified in the course of time and by 1988 one quarter of these women have three children, one third two and only 13.4% a single child. Moreover, unemployment among spouses is not rare and is paradoxically the highest among households with three children in 1988. Finally, a constant increase in mothers living alone can be observed from 1984; they are more numerous than single mothers - probably a consequence of separation from spouses rather than a rise in the number of single mothers.

Certificate of vocational education holders more frequently live alone (10% in 1982) and more than one half have formed a couple by 1982. A quarter have one child, 20% two and only a minority have three children (13% in 1988), the norm being two children for one third and a single child for one quarter of this group. Spouses are less frequently unemployed than among the unqualified. Although baccalaureate holders tend to live with their parents just as frequently as certificate of vocational education holders, fewer of them live alone (16% in 1982) or in couples. The proportion of singles rises slightly due to the increase in single mothers, but contrary to the previous training categories, there are more singles in this group than single parent families. This category thus occupies an intermediary position.

The behaviour of young women who have gone to university or engaged in short-term higher education can be clearly distinguished from that of the lesser skilled. Apart from the fact that they leave their families of origin at an early stage, as indicated earlier, more of them live alone and this trend, accentuated among graduates of long-term higher education, is a steady one: 28% of graduates of long-term higher education and 23% of those who have completed two years of higher education are still living alone in 1988. The former - probably partially due to the greater distance of the universities from their family homes - become independent at an early age when they are still at university. If they live in couples, they do so first of all without children (21% in 1982, 19% in 1988) and generally have no more than two children (20% and 20% respectively), whereas more of those with two years of higher education have two children (29%) than only one child (20%). Finally, the spouses of the women in these two categories are sometimes non-employed (in fact students), and very, very rarely unemployed.

This (both graduated and contrasted) picture of the life conditions of young women according to their academic certificate, illustrates profound differences which tend towards a polarization. The more highly qualified are characterized by early independence, working activity, the late choice of a spouse, a limited number of children, material comfort, the opportunity of choice, plans made. In contrast, the lesser qualified are characterized by early household set-up, childbirth, number of children, separation from their spouse and living alone with children, an inactivity of choices and projects and constraints.

Working activity and its conditions

According to the method developed above, we constructed panel sequences on the basis of the follow-up of two thirds of the triannual employment survey ("gliding panel"), from which the development of working activity and employment status according to certificate can be followed over three years. One half of the unqualified of each sequence are non-employed. The path of the unqualified is characterized by frequent departures from working activity into unemployment, and above all towards non-employment with the arrival of the children: approx. 8% of those working in the first third (in 1982, 1984 and 1986) become non-employed three years later. The unemployed women of each first third are also spread evenly between employment, unemployment and non-employment at the end of each sequence. It should be pointed out that the rise in non-working activity over time camouflages more complex movements, 10% returning to employment in the course of each sequence. The proportion of those in part-time employment climbs from 14% in 1982 to 30% and this trend is accentuated above all between 1986 and 1988, i.e. with an increase in the number of children and the probability of separation from the spouse. Massively employed in the services (2/3) from their entry into the labour market, this is where these women remain. Precariousness affects 10-17% of these women, increasing in the course of time although falling within each sequence: women working with a precarious status end up finding a steady job, but precariousness is fed by other sources (those leaving unemployment, returning to work) and thus maintained at a relatively high level. The labour market is thus segregated for women on two scores: those with precarious jobs in the private sector become salaried wage-earners in this sector, those with precarious public sector jobs at the beginning of the period generally remain there at the end of the period, the most fortunate becoming private sector employees (11% between 1982 and 1984 and 12% between 1986 and 1988) or permanent public sector employees, especially among the younger women (32% between 1982 and 1984, 27% between 1984 and 1986).

The vast majority of certificate of vocational education holders are active (approx. 80% throughout the period), with a substantial rate of unemployment (around 10%). Those leaving unemployment tend rather to move towards employment (38-40% within each sequence) than non-employment (which remains steady at around 20% within each period). Movements from non-employment to employment are frequent and increase over time (from 16% of the non-employed in 1982-1984 to 27% in 1986-1988). More often working full-time than the unqualified (approx. 86%), they less frequently switch to part-time work and there is no significant increase in this movement over time: 6% in 1982-1984 and just over 9% in 1986-1988. Like the unqualified employees of the tertiary sector, they above all start off in the services but do not stay there (the ratio is inverted between 1982 and 1988). For these women precariousness has the same characteristics and weight as for the unqualified, although their chances of obtaining a permanent public sector job once they have worked on the basis of a precarious contract in this sector is higher (one third between each period).

Baccalaureate holders show a rate of active employment essentially identical to that of certificate of vocational education holders, with less susceptibility to unemployment. In this case, although as many of them stop looking for a job as find employment (except between

1982-1984 when most of them found another job), a majority opts for job search. Full-time employment, characterizing a majority between 1982-1984 (approx. 90%), falls constantly and approximately 18% work part-time in 1988. The majority of these women are employees in the tertiary sector, whereas those who worked between 1982-1984 have above all a service job. Precariousness affects some 10% of these women in the first two periods and falls subsequently. The weight of the public sector increases (27-37%). Here again the public sector recruits older women, largely from the private sector.

Although graduates of higher education are frequently non-employed in the first two periods, we know that this is because they are still students. These characteristics, as well as part-time status which may have a different meaning for these women than for the other categories (students' "odd jobs"), lead to difficulties in interpreting the tables.

The 1986-1988 sequence, being the most populated, is the most viable. Whereas homes were followed up in the previous parts, we tried to follow individuals in this case. The described trends confirm the results of more qualitative work on the question and suggest that this is a relevant method. However the frequency of those moving house in this period of their lives means that no certain conclusions can be drawn. This is a weakness of this method, undoubtedly corrected by the size of a sample without our being able to estimate the margin of uncertainty. Movements do not take place at the same point in time according to level of certificate - they may be at an early stage for the unqualified or the highly qualified and somewhat later for baccalaureate holders. The viability of each of the sequences is therefore not identical for each category.

We have however succeeded in pinpointing some major trends. Whereas for baccalaureate holders, leaving education is accompanied by entry into working life and a short path through unemployment with precariousness as a transition, the lesser skilled bear the stigma of instability and the burden of child care.

This overall view of the paths of an age class of women reveals as many constants as disparities among women. Whereas the discontinuity of routes, tertiary employment, in particular public sector and part-time employment are characteristics common to all young women, each of these factors is weighted differently according to the level of certificate and therefore social milieu. The labour market appears to be segregated along three lines, according to gender, sector and training level. But the family and occupational paths of young women are not uniform and do not follow one single rule, i.e. that of female employment. They are divided by yawning gaps. For some women life takes its course under the pressure of constraints, (relative) precocity in setting up household, early entry into working life, abandoned soon afterwards with the arrival of children. Sectional observations however do not take account of movements effectively taking place with the transition from one situation to another, part-time to full-time work, unemployment or non-employment. As clearly demonstrated by A. Dale (in Payne and Abbott, 1990), women pay a higher price for separation from their spouses than men due to the discontinuity of their labour situation. Separation weighs particularly heavily on the non-skilled. The early independence acquired by the highly qualified and the continuity of their activity means that they can escape from this fragility and dependence, can choose their jobs just as maternity and a limited number of children in order to maintain this independence throughout their lives. Job security is a strong factor. Access to public service allows better management of domestic and occupational tasks whereas the unqualified tend to be more subjected to the hazards of the less protected jobs of the commercial tertiary sector.

This study is merely a first stage which attempts to home in on the family and occupational routes of young women. The nature of interferences between the domestic and occupational spheres according to occupations and their development, the point of childbirth and labour situations, type and status of employment with specific reference to chains of states and their cumulation remains to be examined in closer detail.

Notes

1) On these relationships among women in other European countries, see e.g. Zighera, Dale, Dex, Witte, Huinink, Michael Wagner.

2) cf. Payne and Chapman, The changing patterns of early career mobility, in Payne and Abbott, 1990.

3) cf. *Economie et Statistiques*, no. 261, 1993

4) cf. Dex, Sh. Occupational mobility over women's lifetime, in Payne and Abbott, 1990.

5) such as Heam, 1977, Dex, 1989, 1990.

6) cf. F. Audier, 1993

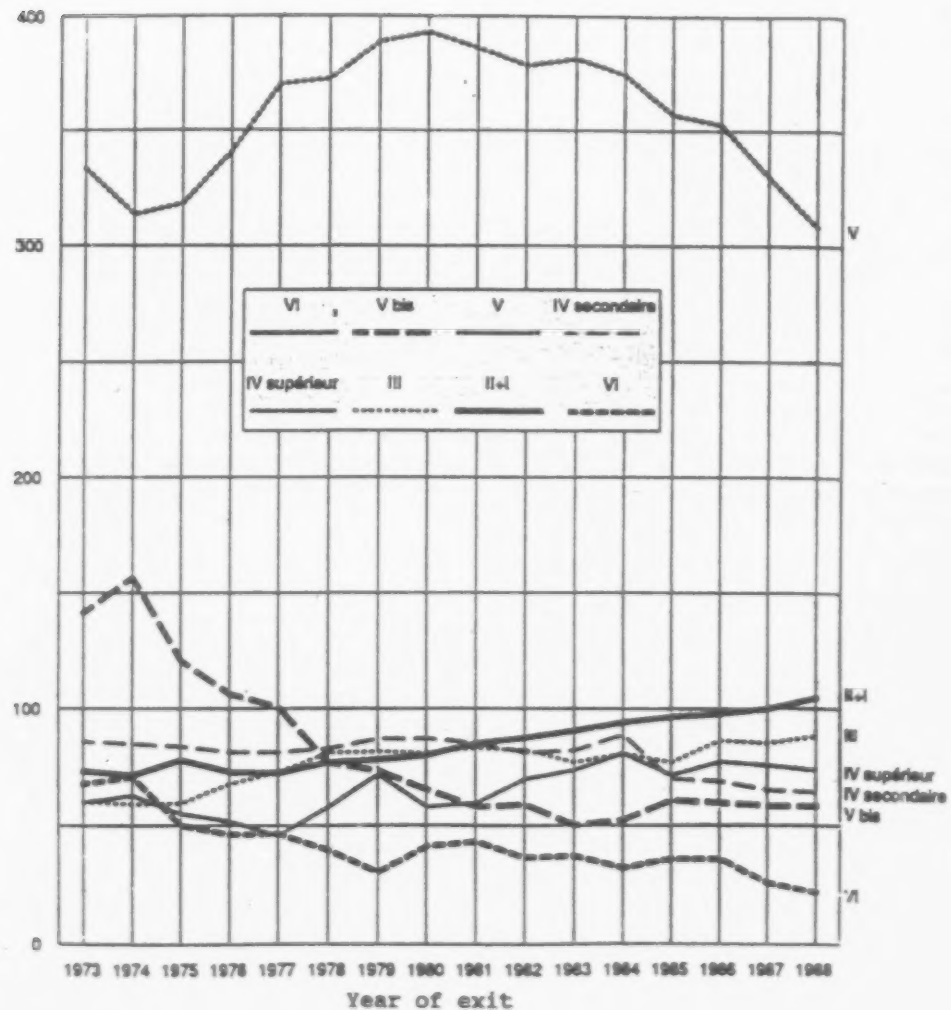
7) The flows of those leaving at this level increase from 1985, i.e. the next generation. In more general terms, there is an acceleration of schooling from 1986 onwards.

Graph 1:

Trends in flows of those leaving initial training (including apprenticeships) per training levels, 1973-1988.

(Audier, F. (1993), la relation entre la formation et l'emploi: une rétrospective des années quatre-vingt. Les Cahiers du Fratic, 1st. quarter 1993, no.5)

Nos. (1 000)



N.B. The considerable decline in the number of those leaving at level III recorded in 1982-1983 and the increases at levels VI and V_{bis} in 1984-1985 are largely due to changes in methodology. Those leaving special education are not included.

Source: DEP

Table: Characteristics of the 20-30 year-old cohort in 1982 and development. 1982-1988

	1982 (1)	1984(3)	1984(1)	1986(3)	1986(1)	1988(3)
Certificate						
None	35.7	35.0	34.5	33.6	31.9	30.7
Vocat. education						
CAP-BEP-BEPC	36.9	34.4	34.0	36.0	35.8	
Baccalaureate	11.5	14.6	13.5	13.7	14.0	14.4
Bac+2	9.8	10.6	11.0	11.7	11.8	11.6
Long-term higher	5.0	5.4	7.0	6.3	7.5	
Total	1 377 442	1 353 860	1 440 139	1 397 872	1 455 285	1 423 942
Situation						
Employed	61.5	63.0	63.3	66.0	65.5	65.8
unemployed	9.0	8.2	8.2	8.5	8.5	8.1
Students	7.0	3.3	3.0	1.2	1.3	1.0
Non-employed	22.5	22.5	25.5	24.3	24.7	25.4
Type of households						
With parents	15.8	9.7	9.4	5.7	5.5	3.7
Alone	16.6	17.0	17.3	18.1	18.1	17.7
In couples						
- childless	18.3	16.1	16.9	13.3	13.6	10.7
- one child	22.8	23.6	23.1	23.0	2.7	20.5
- two children	17.9	23.3	22.7	26.7	30.4	
- three children	7.9	9.9	10.2	13.2	13.5	16.8

The figures in brackets indicate the number of the third: 1 per entry third, 2 for the intermediate third, 3 for the exit third

Source: Employment Surveys 1982-1988

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From Youth to Adulthood project¹: Texturing a reality

Introduction

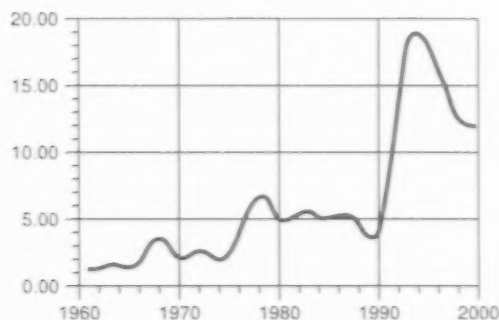
The economic situation in Finland

Finland has about five million inhabitants. Culturally speaking, it is an exceptionally homogeneous country.

The working-age population currently totals about 3.7 million, and the level of participation in the labour market is high (68 %, 64 % for women). The total labour force is thus 2.5 million strong, of which more than 20% are unemployed at present. Unemployment has risen explosively among young people and now exceeds 30%. Less than one tenth of the labour force work in primary production, one third in industry and slightly under two thirds in the services sector.

If we consider the development of the unemployment rate in Finland between 1960 and 1994, we can see that the wage inflation rate moved upwards following periods of economic boom and decline. The problem now is whether it is possible to have (economic and) political equilibrium at a 10-12% unemployment level. This would mean that the aim of achieving full employment (= 4-5% unemployment) has been abandoned.

Unemployment in Finland 19650 - 2000?



Finland is known as a "welfare state". It is an affluent Nordic society which is now being confronted by almost overwhelming economic challenges. A shift is currently taking place from the welfare state ideology which emphasized equality and full employment (partly based on a Keynesian counter-cyclical economic policy supported by regular devaluations) towards a state with flexible attitudes to employment, a state in which both labour policy and social policy are flexible and able to adapt to the national economic competitive ability.

The difficulties involved in this transition in Finland were aggravated by the collapse of trade with the former Soviet Union, the deregulation of the money economy which was carried out in the name of neo-liberalism during the 1980s (with unfortunate results in several respects) and the subsequent over-indebtedness of the public and private sectors. Now these debts have to be paid.

The devaluation which had been assumed to be the last, or almost the last, was carried out in 1991. Now the Finnish mark is floating. Finland's links with the European economy, based on terms set by the major companies engaged in international competition, are increasing. Domestic demand has been repressed and the public sector is being cut back, especially in the fields of social welfare and education. Domestic industry has been beset by a wave of bankruptcies, the result of high interest rates and a deflationary economic policy. Politicians are now wrestling over what domestic nostrums could be used to revitalize or deflate the economy.

Being a Nordic welfare state, Finland has fairly extensively organized and differentiated institutions in the areas related to education: schools, the labour market, the education market and production units. No party can unilaterally dictate terms to another. Factors related to social background affect success at school and choices made, but the school system is not structurally bound to these factors.

Simultaneously, the state system of control and regulation is changing from a system of management by resources to management by results. Qualifications and the methods by which they are certified are being given new roles as mechanisms controlling the state economy. The national recovery strategy for the 1980s was the development of an information and services society combined with efforts to diversify exports. This strategy was unsuccessful in many respects. Recently, the emphasis has been put on re-industrialization, i.e. safeguarding and underpinning the position of Finland's strong industries - the wood, paper and metal industries - as integration to Europe makes progress.

All this means that the generation which left comprehensive school in 1985 planned their future working life during a period of economic boom and social optimism. This generation is now coming onto the labour market in the midst of a serious depression.

The problem

In this section I will introduce certain basic concepts to map out some institutional terms connected with the school/employment network. I will not make long excursions into empirical or theoretical backgrounds, but limit myself to passing references to a few theoretical approaches in order to illustrate my basic intentions.

First, I would like to make one restriction: this paper will not delve into macro-economic problems. The basic problem here is not unemployment: it is impossible for the educational system to eliminate unemployment, as this is an objective which would require a truly large-scale change in the organization of working life and a fundamental re-orientation in the relationship between employment and education. This would for example mean reducing working hours (35 h per week; Negt, 1984) and/or allowing a significant number of workers to study during working hours. Thus the alternative to work would not be unemployment but schooling, education. The most desirable aim is "educational" work - work organized according to the principles of education.

In the discussion on the relationship between school and working life, we can see some general trends in ways of expressing of the basic problem (Little, 1984). We can summarize the shifts in the emphasis of research and policy on education and work as follows:

- personal survival
- interaction of education and working life
- the social character of economic problems

There are shifts on two dimensions. The first dimension is connected to the boundary between employment and schooling: is it possible to help an individual manage his life by changing the relationship between employment and school? The second shift is on the dimension of responsibility: what is an individual's responsibility in finding a job? If he has a good education, does he have to create a job for himself? Does the organization of social institutions prevent them from solving the problem of unemployment/ underemployment?

If these questions reflect real tendencies, then our topic "Transition from school to work" is not only an administrative problem. Rather, there are cross pressures to change the relationship between these two social institutions. The task of finding one's place in working life and the process leading to its fulfilment are exponents of these cross pressures.

How, then, should the basic problem be formulated? Defining the relationship between school and employment as a transition process very quickly directs our attention to administrative problems: how to handle the channels leading from school to work, how to regulate their volume, their speed and direction. To avoid this kind of approach, I think we must pay attention to the structural conditions of the transition process. We must try to find some criteria on how the school/employment network should be arranged so that it supports individuals' efforts to manage their own lives. From this point of view, the problem is as follows: On what institutional terms is the school/employment network² an open social structure, i.e. a developmental process for an individual's autonomous life management?

In other words:

Does the pathway from school to work have any effect on the way the new constellation of activities and behaviour patterns of adulthood is formed?

1. Pathways from comprehensive school to upper secondary level

In Finland, boys and girls have three main possibilities after comprehensive school:

- 1) general upper secondary school (gymnasium)
- 2) vocational institutions or schools
- 3) transition to working life

If we take the generation that left comprehensive school in 1985, we can see in Table 1 where they were in 1987 and 1992³. The table shows four main pathways from school to work:

- 1) via gymnasium to higher education and subsequently to the employment market. I have labelled this group "Highers".
- 2) after gymnasium on to vocational education and then to the employment market. These are the "Polytechnics".
- 3) Vocational education (shorter or longer) and transition to the employment market: the "Experts".
- 4) Transition to the employment market without any kind of examination after comprehensive school: the "Outsiders".

Table 1 The pathways of comprehensive school leavers

Autumn 1987	higher education	Spring 1992 vocational education	working life + vocational examination	working life, no. voc. examination	Total c-% r-% (N)
gymnasium	35	32	33	1	55% 100% (795)
vocational institution	1	16	82	2	23% 100% (336)
vocational school	-	13	87	-	14% 100% (198)
no education	-	6	25	69	8% 100% (112)
r-% c-% (N)	19 100% (277)	24 100% (338)	51 100% (734)	6 100% (92)	100% 100% (1441)

We can try to explain this division in terms of five factors: (1) the social background of the family, (2) the father's education, (3) the mother's education, (4) achievement in comprehensive school and (5) the level of urbanization of the place of residence. These factors would seem to account for about 55% of the pathway choices. Assessment of performance at comprehensive school is of course the main explanatory factor, but there is also a correlation between this factor and the mother's or father's education level and to the social status of the family. In Finland, development zones do not play a role in accounting for the pathways followed.

2. From youth to adulthood: texturing a reality

2.1 The task: "Finding one's place in working life"

The years following vocational education - the end of youth and the beginning of adulthood - place many demands on young adults. The social pressures on them manifest themselves as tasks which have to be performed - in one way or another.⁴

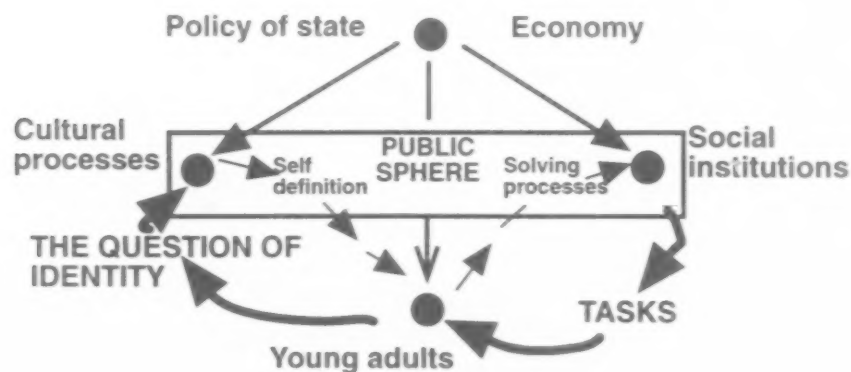
One of these tasks is finding one's place in working life. This process can evolve in many ways. Usually it is a long serpentine path which can give developmental impulses to young adults - or destroy the basis of the identity that was formed during the education process. Or the task of finding a place in working life could prove to be exclusively the responsibility of state political and economic institutions, and not at all of young people themselves.

We have - in principle - two ways of solving the tasks set by the social institutions. First, the solving process might not be a developmental process for the person involved in it; in that case it takes place without his/her personal involvement. It is simply a necessity - not an issue of identity in the form of questions like "who am I, what shall I be?". The other way to solve the task, however, requires answers to these questions regarding identity.

One of the basic tools for conceptualizing working life is the idea of **vocation**. It gives a basis for identity, for vocational orientation: where to find my own place, which job is my job and which one is not. If it is possible to find one's place without personal involvement, without raising the question of identity - or if the personal involvement has nothing at all to do with the task to be solved - this indicates that the social institutions with their tasks and our everyday experiences are going in different directions.

The process of creating identity and the tasks set by social institutions are then different (see Diagram 1): for instance, the concept of "vocation" can help orientation on the employment market, but perhaps it does not have enough force to structure the action of this market. The principles which structure the labour force are in many cases based on the needs of enterprises. In that case, a person with a vocational identity has to reinterpret him/herself as an element of labour force with general qualifications and without a clear vocational identity. Attachment to a vocation is then more harmful than attachment to an enterprise in terms of flexible use of labour.

Diagram 1 On the relationship of young adults, social institutions and cultural processes



In the transition process from school to work we see the relationship between individual activity and social institutions in a crystallized form: how social and cultural processes manifest themselves in individual development and how the economy and policies of the state are transmitted via social institutions to young adults in terms of tasks which have to be solved. If finding an answer to the question of identity is not connected to solving the tasks set by the social institutions, it is impossible to manage one's own life, to give one's path a direction in that social environment. If, for instance, vocational attachment does not take place during the transition from school to work, the possibilities to give one's path into working life a direction will be narrowed down.

We can formulate the problem in other words and open an interesting possibility for connecting three different conceptual levels: the institutional processes (the school system, the employment market process, the production process), the production of identity (the transparency of the institutions) and the individual's autonomous management of life (the developmental tasks of adulthood):

On which institutional terms are social institutions transparent for a young adult so that the task he/she must solve ("finding his/her place in working life") helps him/her to understand society and how it works? Can this solving process also generate means of handling the institutional terms under which the school/employment network takes place?

We can agree with Mitev (Mitev, 1983) that when a new generation of young people is being socialized into working life, this generation "rejuvenates" working life. Is this possible? Our own experiences have to be shared, to a certain degree, by the whole generation, and there must be some "transactional topics" between working life and our experiences, i.e. there are topics in which one can find elements of the cultural symbols of one's own generation (identity) and elements of the social institutions.

The question is the same for all generations: how are our everyday experiences related (a) to the autonomous management of our lives and (b) to the social institutions. Seeing the transparency of a social institution is impossible for a Robinson-like individual. It is possible for a whole generation (or for any other social community), but there must be some "place", or a social form, in which these "transactional topics" are handled. Traditionally, this "place" is a form of the public sphere⁵.

The public sphere is an expression of social relations and forces. On its surface we cannot see these relations. We cannot see or study social relations with a magnifying glass or a microscope; the only way to make them understandable is to use abstractions, concepts. We can use concepts as our tools to pierce the surface of institutions.

2.2 Adulthood

The birth of an adult means entrance into the public sphere, facing other people with a - more or less clear - positive identity. Adulthood is a new step in the process of (social) individualization: an individual's deeds are now recorded into the social memory (his own and the public memory) as real facts and not as elements of a search for experience as they were during earlier life.

The public sphere has two basic aspects: on the one hand, there are the social institutions (public opinion, the mass media, advertising, public institutions and places). On the other hand, the public sphere is a horizon for experience: it gives us the tools and frames for the interpretation of social reality, a horizon to organize our everyday experiences.

These two aspects of the public sphere must have a common basis if we want society to have some kind of transparency. Hidden in the concepts we use are the social relations and forces, the expression of the public sphere. We must be socially literate. We must be able to read and write the social texts of our everyday experiences.

Public sphere forms change according to the tools and organizational forms we have in use. The public sphere of churches, nobility and the courts is very different from that of newspapers, theatres and meetings, as is the public sphere of television, films, radio and videos. But there is another central factor which influences public sphere forms. Historically, the basis for private life was the emergence of private property. To the progressive bourgeoisie, private life meant life inside society, and the public sphere was a mediator between society and the state. The society of this time was economically non-transparent: one could define one's own position and possibilities only through the market process.

The birth of a social state redefined these relationships: the borderline between society and the state became difficult to draw. Family made life even more private (a form of intimate relations) and many parts of society became a function of the state. Public life was transformed into a **produced public sphere**. It became an area of specialized and cultural industry, where the laws of market processes are often more important than cultural processes. The opposite of the public sphere (Öffentlichkeit) is then not only privacy and social control but also obscenity: a situation in which a form of publicity loses its transparency in such a way that we are not able to read the social meanings of everyday events around us.

Table 2 Four forms of social transparency

institutional transparent	individual/transparent	
	yes	no
yes	public sphere	social control
no	private life	obscenity

Adulthood as a developmental aim requires a "place" for the interpretation of one's experiences, i.e. some form of public sphere. The aim - adulthood - is an ability to use one's own mind in public. By stepping into public relationships we at the same time (re)produce a public sphere by using conceptual tools to structure the situation. Through the various public sphere forms we commit ourselves to the institutional conditions of action.

The transition from youth to adulthood means constructing new public spheres in one's personal life. This public sphere now takes on a more constructive role: we have to be able to construct a solution to the very difficult cross pressure between our three "roles" as a producer (member of a working organization), a citizen (member of a nation) and human being (member of humankind).

2.3 Texturing a reality

We can understand the transition from youth to adulthood as a process of texturing reality through forms of publicity. This process of texturing⁶ a reality has at least two sub-processes: activities and behaviour patterns⁷ vis-à-vis reality.

The main questions vary between these two sub-processes: activities are object-oriented, whereas "behaviour vis-à-vis reality" is more socially based. Object-oriented activity takes place under a social form of public sphere without this form being questioned or seen. "Behaviour vis-à-vis reality" concentrates on these relationships to shape social literacy without much interest in object-oriented activities.

My hypotheses are as follows:

1. Activity as a life style correlates with family life.
2. "Behaviour vis-à-vis reality" is formed by the quality of the nearest social environment.
3. The four pathways after comprehensive school each form a different type of public sphere: life in gymnasiums, vocational schools and institutions and on the labour market involves different types of social relationships.

Table 3 The dimensions of "behaviour patterns vis-à-vis reality" and life style used in the survey

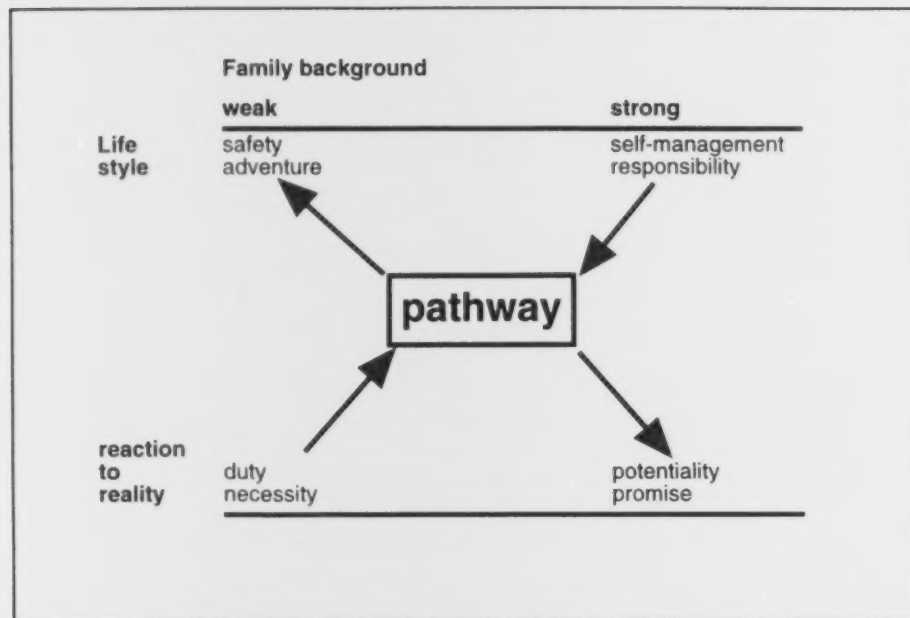
Process of texturing	Social structure		Five forms of life style (36 items)
	organic	fibrous	
organic	A necessity	C potentiality	self-management safety adventure responsibility facade
fibrous	B duty	D promise	

We can interpret empirical results as follows (see Appendix 3)⁶:

1. The "Highers" group is oriented to a greater extent to problems related to life style: how do I organize my life? What is my style? "Outsiders" have other questions: what is my position, what are my possibilities with other people? The "Highers" put "I and my possibilities" first, but they are not concerned with "the hardware" of life. "Outsiders" see their possibilities more in relation to other people.
2. "Highers" first question their own ideas and then form their behaviour according to reality, but "Outsiders" behaviour patterns are formed before, or outside the issue of identity. Their life style is a question of adventure or safety.
3. The "Highers" life style there involves ideas on autonomous management, responsibility and the need of a facade for these. Reaction to reality is open: reality is full of potentiality and promises.
4. In the "Outsiders" reaction there are feelings of necessities and duties. In their life style there is the need for safety and adventure.

We can see the step to adulthood as a new constellation of the public sphere in which activities and behaviour patterns vis-à-vis reality have to be related to each other, becoming a kind of "active behaviour".

Figure 3: A model of the roles of pathways



If a family has a strong status, it gives the child a possibility to develop in a process which is based on activities with open structures. Reality appears as a potentiality, it looks like a place for a game. The school institution continues this process in gymnasiums and universities. There, learning processes are based on learning from text. Learning is a game with texts. It is a process of texturing reality in order to learn social literacy with distance.

If the family has a weak status, the starting point is quite different: the developmental process is a reaction to closed structures. Reality is against the child. There is not enough room or time for learning games, reality is too close. Learning processes are connected with "hardware". The vocational pathway continues this process because it is for "practical boys and girls". This process of a texturing reality aims at learning another kind of social literacy, with non-distance. Thus the pathways have a reinforcing influence on both groups, but in a very different sense: for one group it represents promises, even temptations, for the other a need for safety or even escape.

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Notes

- ¹ See appendix 2.
- ² I have used the term "network" in two different senses. First, I wish to emphasize that social networks are a new kind of strategy used by the social state to handle situations and life processes outside or on the fringe of social institutions (see Eräsaari, 1986). Secondly, I would like to point out that this network strategy opens the administrative "pipes" in a way that both creates new possibilities in autonomous life management and demands increased understanding and knowledge from those using these networks.
- ³ A nation-wide sample of 2500 19-year-olds were surveyed about their educational choices and future plans in the winter of 1987/88 and in the spring of 1993, i.e. 2.5 and 7 years after their departure from comprehensive school. The postal questionnaires were answered by 75% and 71% of the young people surveyed respectively.
- ⁴ I do not mean that these tasks are determined by the social institutions, but that they grow in everyday practice and are usually expressed in a very unproblematic way as "the needs of life"
- ⁵ I use the term "public sphere" as a translation of the German concept "Öffentlichkeit" (see Negt, Kluge, 1972).
- ⁶ There are two basic meanings of **texturing**: on the one hand, the question is how we read the social textures, i.e. our abilities in terms of social literacy. On the other hand, how we are able to "texture", write or weave our social milieu.
- ⁷ So I do not use the concept of "behaviour" as it is used in the positivistic tradition of psychology.
- ⁸ I use groups formed according to the pathways and sex as a statistical indicator.

Appendix 1

The educational system in Finland

Finland has nine years of comprehensive school, after which about 55 % of each year group choose to go on to general upper secondary school, 36 % choose a vocational school/institution and about 9 % enter the labour market. After general upper secondary school, only one in three goes on to university, while two thirds go on to vocational education sooner or later.

Vocational education takes place after comprehensive school education and usually lasts two or three years. There are 24 basic educational streams, and over 220 different vocations are taught, each with a corresponding diploma. The assessment of the diplomas is school-based and carried out internally. The diploma examinations are based on curricula approved by the National Board of Education.

There are three experimental reforms under way in Finland. One of them is an experiment in post-comprehensive education going on in regional youth schools and aiming at enabling general upper secondary students to undertake vocational studies and allowing vocational school students to engage in upper secondary school studies. Another large project aims at developing certain vocational schools into vocational colleges, i.e. non-university higher education institutions. This project is also experimental.

The third reform project deals with modernization of the curriculum. The basic idea behind this is to give schools a considerable amount of authority over how the teaching is arranged. Assessment of the success of activities will be based on the results achieved. It follows from this that the entire administration of certification and assessment will start heading in a new direction. The lead has been taken in adult education, where the idea has been to arrange examinations by an independent body outside the school, i.e. employers, employee organizations, the state and research institutions.

A reform of vocational education for young people, which was planned in Finland during the 1970s and implemented in the 1980s, was based on the concept that the young student, having graduated from comprehensive education, would first choose his or her field of education and only then select the educational level. The idea was for the student to be able to advance in the chosen field all the way to university-level studies. Upper secondary schools were not included in this reform. The "first the field and then the level" idea emphasizes vocational mobility from the viewpoint of career; education should support the possibility of moving from one level to another without the academic level of general education forming an impenetrable barrier to further progress.

In Finland vocational education is based on school education. Up to the present time, teaching has been controlled by a curriculum drawn up jointly for all. In principle, with the school system having uniform contents and common nation-wide objectives, vocational diplomas in Finland have been mutually comparable, and the criterion has been to make it unnecessary to measure professional skills with separate examinations or tests.

During the second half of the 1980s, the winding-down of centralized control was initiated by a reform of the curriculum system. The task of the central administration became limited to producing the groundwork for vocational education curricula. Another step in winding-down nation-wide control is that educational institutes are able to deviate flexibly from the nation-wide bases, according to local requirements, within the scope set in the basic requirements. The party which arranges education is responsible for achieving the educational objectives, but has more freedom to choose the way in which these objectives are reached.

In Finnish vocational education, the traditional dichotomy continues to hold sway: education is arranged by public authorities who are also responsible for the quality of it. The labour market and the employers themselves are responsible for assessing the skills of the workers who have received education. The collective bargaining organizations have participated in planning and arranging education and training in Finland primarily in their role as a negotiating party. Employers do not finance vocational education, except on-the-job training, which takes place in industry's own educational institutes.

Appendix 2

The project

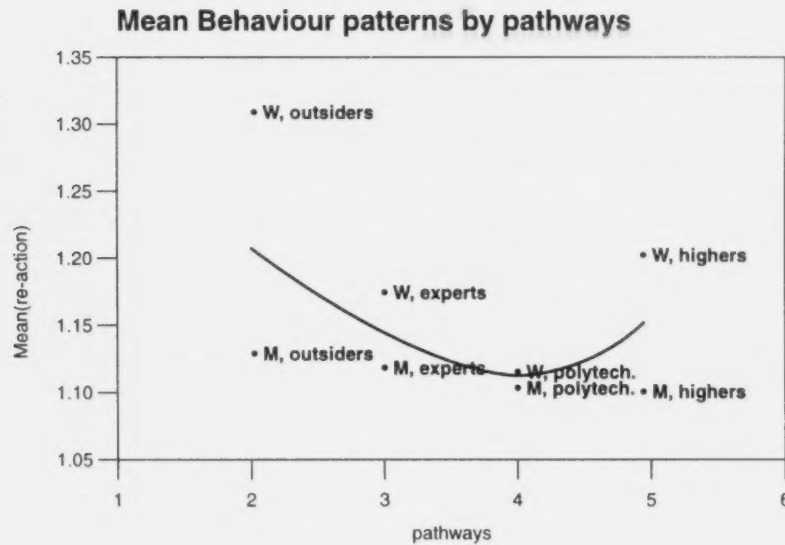
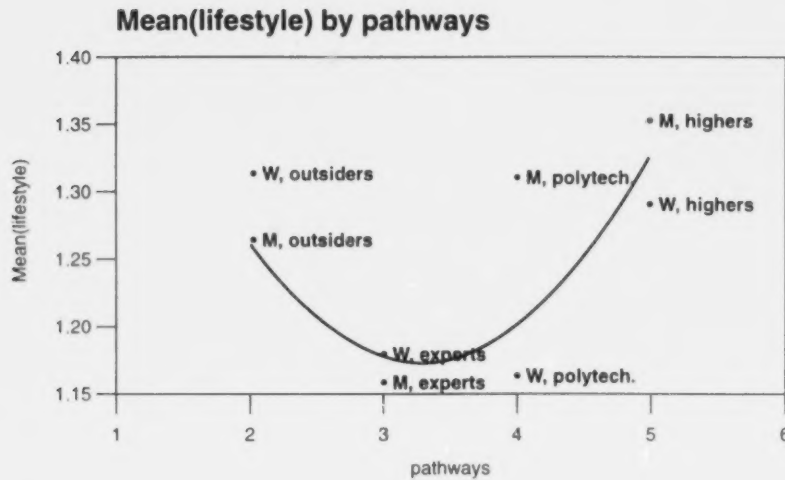
The basic question of the project "From Youth to Adulthood" is how the children of the 1970s who experienced their youth in the 1980s are now transferring from youth to adulthood, especially with regard to the transfer from comprehensive school to vocationally differentiated education and afterwards to working life. What can be concluded from the relationships of education, employment market and production proper, when they are interpreted in the light of decisions and conflict pressures related to the young adults' educational and working life? The first aim is to describe through their educational and work histories the basic structures of the transfer paths with a representative sample (N-2500) of comprehensive school students who completed their studies in 1985.

The present study is not only interested in the question from where to where, i.e. social and regional mobility. The second aim is to evaluate the relationship between individual and society more profoundly, using the following factors as a starting point: **structural factors** (family, social status, cultural inclinations, environment (structures of livelihood, tempo of change), **mediating factors** (education, reaction to reality, life-style), **expressive factors** (understanding oneself, identity, motivation), **discernible factors** (educational and work histories). Methodologically the most essential level is that of mediating factors.

A research group (Raimo Mäkinen, Hanu Jalkanen, Matti Vesa Volanen, Sakari Valkonen), Institute for Educational Research, University of Jyväskylä, Yliopistonkatu 9, SF-40100 Jyväskylä, Finland

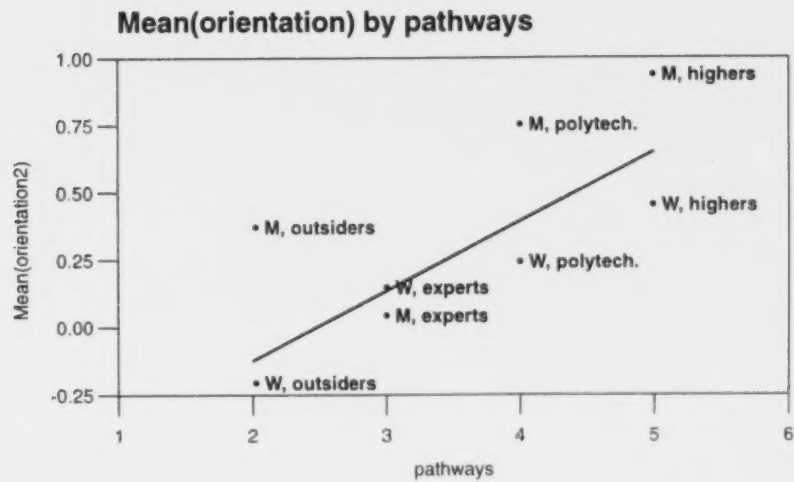
Appendix 3A

The strength of expressions of life style and behaviour patterns vis-à-vis reality by pathways and sex



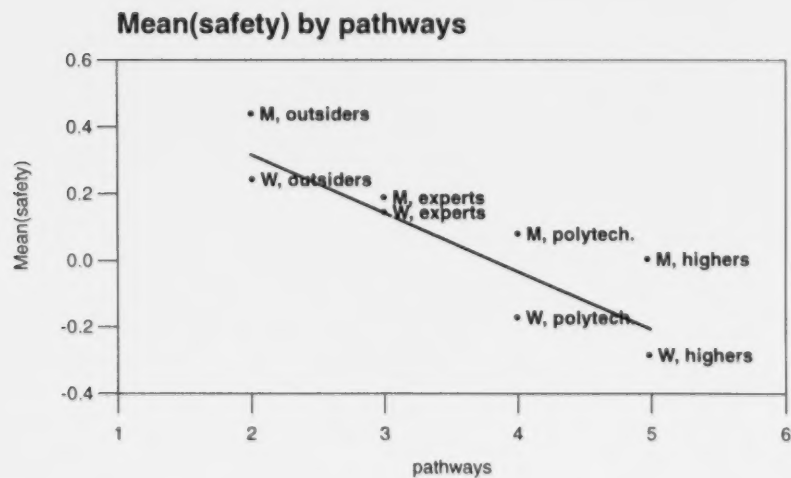
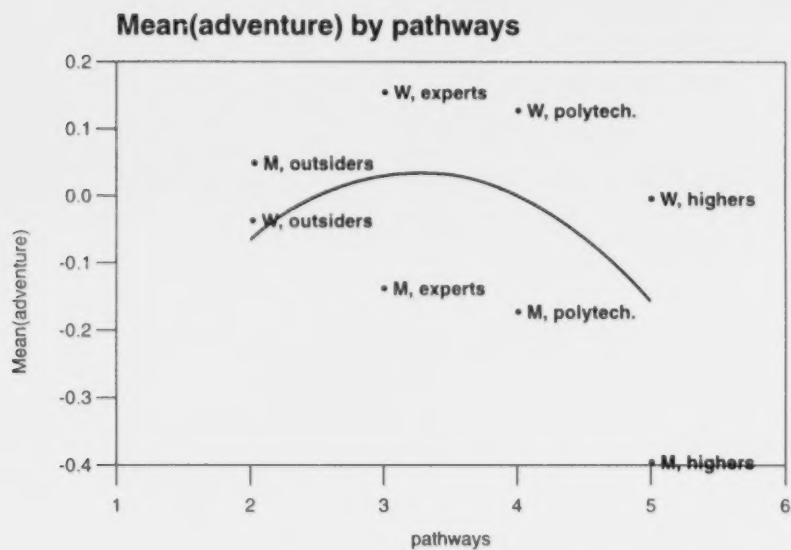
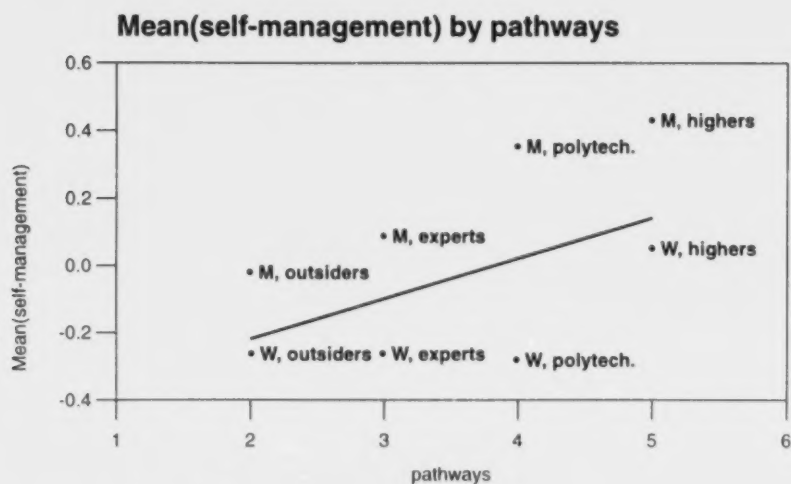
Appendix 3B

The strength of expressions of life style and behaviour patterns vis-à-vis reality by pathways and sex

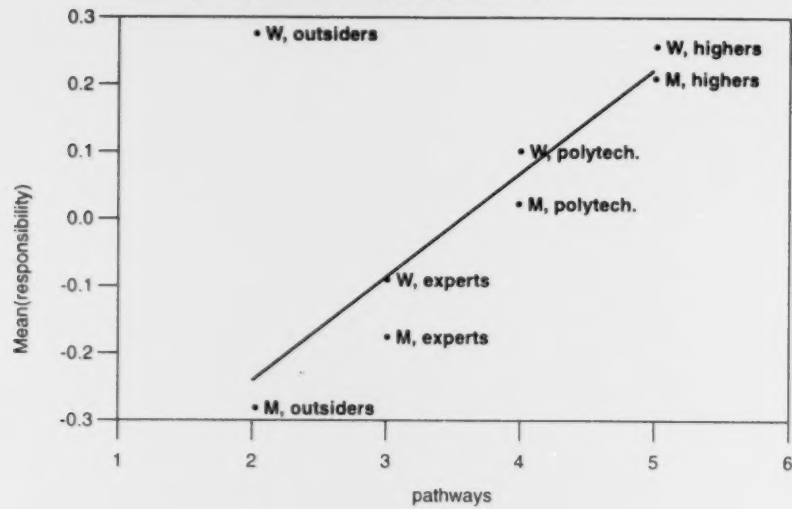


Appendix 4

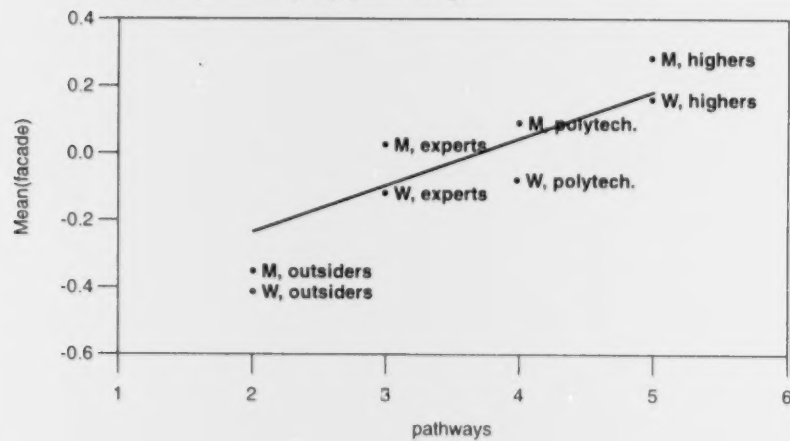
The strength of the dimensions of life style and behaviour patterns by pathways and sex



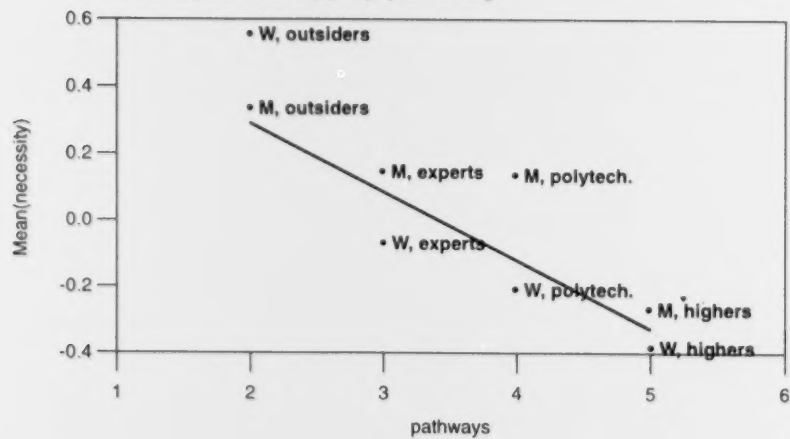
Mean(responsibility) by pathways



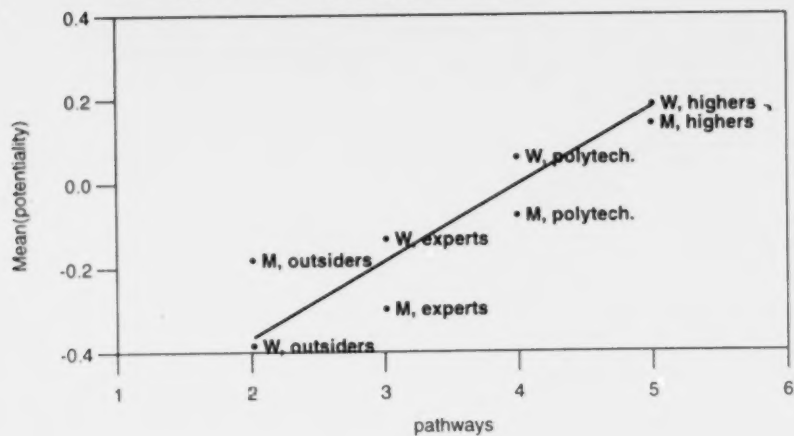
Mean(facade) by pathways



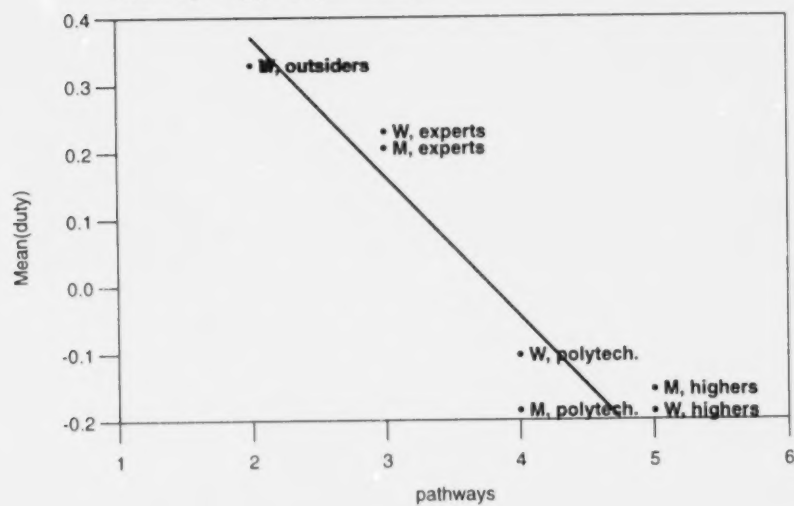
Mean(necessity) by pathways



Mean(potentiality) by pathways



Mean(duty) by pathways



Mean(promise) by pathways

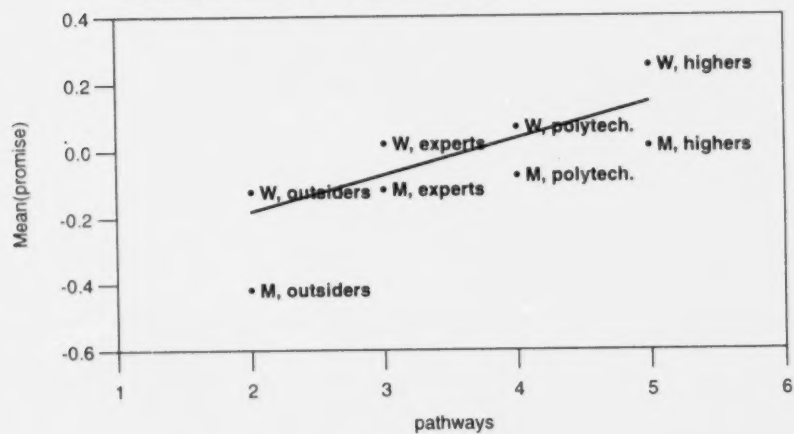
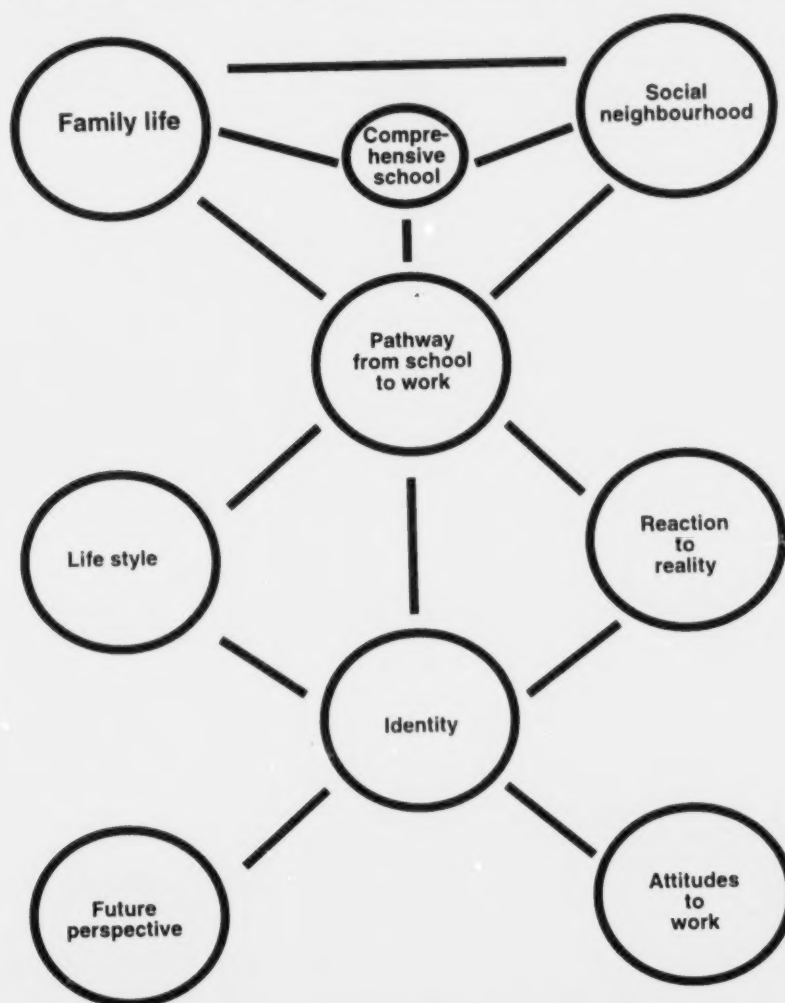


Table 3 Statistical connections of life style and behaviour pattern dimensions and background factors.

Dimensions	social status	father's education	mother's education	pathway	sex	degree of urbanization	local development level	expl. power (%)
self-management	-	xx	-	xxx	xxxx	x	-	7.8
adventure	-	xx	-	xxxx	xxxx	-	-	3.7
safety	-	xxxx	-	xxx	xxx	-	-	4.8
responsibility	-	xx	-	xxxx	-	-	xxx	3.4
facade	x	-	x	xxxx	xxx	x	xx	2.8
necessity	-	-	-	xx	-	xx	xx	2.0
potentiality	-	-	-	xxxx	xxx	xxx	xxx	5.1
duty	-	-	-	xxxx	-	xx	-	4.5
promise	-	-	-	-	xxx	x	-	2.8

p <.001 = xxxx
 <.01 = xxx
 <.5 = xx
 <.10 = x

Figure 1: The work model of the "Transition from youth to adulthood" project



Main features of the structure of the working population

In 1992 a census was carried out to compare the number of employed persons to the previous year both in the national territory as a whole and in the Basque Autonomous Community (Comunidad Autónoma Vasca - CAV). Alava also registered a decline in employment levels.

A Survey of the Working Population showed that between the four quarters of 1991 and 1992 Spain lost 3.3% of its employment or 413,000 jobs; the decline is even greater in the CAV which lost about 5% of its employment (4.7% according to EPRA and 5.5% according to EPA).

During this same period Alava experienced a loss of 1,500 jobs or 1.5% of employment.

The profile of the working population in the 1990s now contains some features which are very different to those just ten years earlier.

Indeed, the major changes which have occurred in the last few years - employment crisis, internationalization of the economy, technological innovation, changes in the structure of demand together with social and cultural changes - have radically altered the structure and the composition of the working population.

In general terms, some of the features of the present structure of employment are the following: the gradual decline of employment in agriculture, the development tertiary sector, the increase in highly-qualified occupation parallel to the development of non-qualified service occupations, the development of independent work in particular in the form of self-employment, either because of the crisis or because of changes in work organization, the development of employment in public administration and directly related to this, the expansion of service-related occupations together with changes in working conditions.

In the following we will examine the most significant features of the present employment structure.

Slower development of employment in services in Alava as compared to the CAV and the country as a whole

Industrial employment continues to be a very important component in the structure of employment in Alava; employment in agriculture is progressively becoming less important - in 1970 12.4% of the working population was employed in this sector; in the services sector there has been a major development - in 1970 only 28.6% of the working population of Alava was employed in the services sector.

But, even if the services sector is the one with the largest number of workers, it has less weight in comparison to that of the CAV or the whole of Spain.

Development of employment in public administration local services commerce and hotels/restaurants

There has been a notable development of employment in the sub-sector "other services" which has undergone considerable growth in the last 20 years.

With regard to sex, there has been a tendency in the last few years towards a concentration of women in the services sector, particularly in public administration, in commerce, the hotel trade and other non-commercial services.

The presence of women in industry is progressively declining. In 1970 43% of working women were employed in industry, in 1992 only 15% of women in employment were to be found in this sector.

In principle, the above figures suggest that far from having more sectoral diversification, the trend is towards a greater segregation of the sexes.

The occupational structure has undergone major changes; professional and managerial personnel has increased, so have administrative and services occupations; parallel to this the occupational structure of the workers has lost importance.

There has been a noticeable increase in the number of professional and managerial personnel which accounted for 7.2% of employment in 1970 and rose to 13% in 1981 and 17% in 1992.

In the present structure of employment "industrial workers" and "other services staff" are the largest professional groups

Higher-level technicians and professional staff make up some 4% of the working population in Alava.

In comparison to the CAV, there is less predominance of technicians and professional staff in Alava.

As far as distribution by sex is concerned, men are to be found in more or less the same proportions in all occupational groups; women, however, are concentrated in two occupational groups: other services staff with a figure of 30.4% and administrative auxiliary staff with a figure of 22.5% of employed women.

Low incidence of "higher-level technicians and professional staff" in industry

Of the 3,900 technicians and higher-level professional staff employed in Alava, only 400 are to be found in the industrial sector.

Only 1% of employment in the industrial sector is made up of "technicians and higher-level professional staff" as compared to 6.8% of employment in the services sector.

If Alava is compared to the Autonomous Community and if the four principal professional categories of the occupational classification are taken (higher-level and medium-level professional staff and technicians managerial staff and administrative heads) it is seen that the internal occupational structure of industry shows a larger share of technical and executive personnel in industry in the whole Community than in Alava -14.2% for the CAV and 11.5% for Alava.

With respect to the services sector, the relative weight of qualified personnel in the occupational structure is similar in both territorial units.

Higher-level technicians and professional staff are concentrated in public administrative and public corporations

With respect to salaried technicians and higher-level professional staff, more than half are to be found in public administration and public corporations, i.e. 54%.

The same applies in a more accentuated form to the medium-level technicians and professional staff; of the 5,300 medium-level technicians and professionals employed in Alava, 4,900 or 92.5% are to be found in the services.

If the internal occupational structure of public administration and public corporations is compared to that of the private sector it is seen that there is a much larger share of technical personnel in the private sector.

On the other hand, public administration and public corporations account for an important percentage of employment, e.g. 20% of salaried employees in Alava. The figures for the CAV as a whole are similar.

However, Alava is not the territorial unit in which the most persons are employed in public administration and public corporations. In Vizcaya this figure rises to 18.8% whereas it falls to 11% in Guipuzcoa.

On the other hand, in keeping with the importance of industry in Alava, there is a larger percentage of industrial occupations in the occupational structure as compared to the CAV.

Lower educational level of the working population in Alava as compared to the CAV.

In Alava the educational level of the population of 16 and over is lower than in the CAV as a whole; the same applies to the working population and the unemployed population, even though within the unemployed population the differences are less pronounced.

Growing incidence of temporary employment together with shorter periods of temporary contracts

At the present moment - in the third quarter of 1992 - one out of three salaried workers in the State is temporary. In 1986 in Vitoria the rate of temporary employment was 9% even though for the age-groups below 30 it reached 21%.

The temporary employment rate is particularly high in the young age-groups - from 16 to 29 -, and most pronounced in the 16-24 age-group; 73% of young persons aged 16 to 24 have temporary employment.

With respect to sex, temporary employment has a greater impact on women; 39% of salaried female workers have temporary jobs as compared to 30% of the men.

In addition to temporary employment the duration of contracts is also short; the most frequent contract is that for 4 to 6 months, i.e. for 47% of temporary salaried workers; together with this, almost 7 out of 10 persons recruited temporarily have contracts with a duration below 6 months.

There are some differences in the duration of contracts in the public and the private sectors; in the former the percentage of contracts with a duration over 6 months is somewhat larger - 43% as against 30%.

Even though the duration of contracts is kept to a minimum as a whole, in terms of age, the duration is shorter for the younger age groups; thus, 78.6% of youth between 18 and 19 years of age have contracts which do not exceed 6 months.

As far as the sector of activity is concerned, leaving out agriculture, the construction sector is the one with the highest rate of temporary employment followed by commerce. Energy and transport are the sectors with the lowest rate of temporary employment, industry in general has a lower rate. The reason for this is that the workforce in industry is older, industry also recruits less than the services.

The shortest duration of contracts is to be found in commerce and other manufacturing industries, but the differences between sectors are not great with the exception of other services.

This aspect was also examined by the study in access mechanisms which confirmed the findings presented above. The study showed that there is a general trend towards temporary contracts as only 5% of recruitment in the last 5 years involved a contract of indefinite duration at the time of the first job; on the other hand, the percentage of initially temporary contracts which are converted into fixed contracts is barely higher than 8%. Parallel to this, the study shows that there is a high percentage of labour agreements without a contract - 9.5% of recruitment in the last 5 years and 19.5% of employed persons seeking another job.

Current recruitment practice

- Temporary employment is undergoing a major development - 17% of recruited persons.
- Temporary recruitment has ceased to be a marginal feature in the most widely used means of recruitment.
- Single-job, interim, part-time, temporary and provisional contracts geared to market needs, are the most widely applied means of recruitment at present - 9 out of 10 employment contracts are one of the types listed above.
- There are some differences with relation to sex: for women there is a predominance of provisional or part-time contracts; for men the contract most widely employed is the one for a "specific job or service".
- Both fixed contracts and recruitment provisions laid down for groups with special difficulties - persons above 45, women, youth, disabled persons - are a marginal feature in actual practice.

Mechanisms for access to employment and recruitment channels

Roads for access to employment

In the labour market of Vitoria-Gasteiz there is a predominance of informal roads to employment through intermediaries such as family members, friends and other acquaintances; this suggests that - compared to formalized recruitment of labour, the social area of informal placement clearly predominates in the town as against other more or less formalized sources of job procurement whether public or private.

If we take a look at the jobs obtained through different channels in the last five years, we see that social relations are the most effective method of getting access to employment; half the persons employed in the last five years obtained their jobs through social relations.

But, within the category of social relations, friendships are the best way of getting a job; 1 out of four jobs or 26.6% were obtained through friends, 16.5% through other family and 7.8% through other types of social relations.

After friendship, direct demand in the company accounted for 17.1% of new employment in the last five years.

Competitive examinations were the means of access to employment for 11.6% of recently recruited persons.

Advertisements in the press - 5.4% - and study centres - 5.2% - are less successful.

INEM only was the principal means of access to employment for a mere 2% of recruited persons in the last five years in Vitoria-Gasteiz.

The access mechanisms most used by the persons who recently found jobs were the social relations and friendships - which was the mechanism used most and which provided the largest number of jobs -, followed by INEM, Advertisements in the press and direct demand from the company.

The relative effectiveness of each access mechanism can be assessed by establishing the ratio for each means between the number of jobs provided and the number of persons who used this mechanism; in this context the highest rate of effectiveness was to be found in the family relations/friends whereas the lowest rate was that of INEM.

Social relations constitute a variable which is closely associated with work experience, because once a person is integrated in the productive system, his actual range of activity becomes much broader. However, it is obvious that other factors also play a role, such as the level of integration in groups, associations or social sectors which are different to the strictly economic sectors but are adjacent to them.

However, it should be mentioned that there is a greater tendency to do without a formal work contract when the job is obtained through social relations, especially through friends.

In addition to this, in the case of jobs obtained through social relations, it is often felt that the job does not really match the professional characteristics of the job-seeker; only 47.4% of those who acquired employment through this channel felt that the job allied with their professional category.

The relative importance of direct demand from the enterprise should also be stressed, a mechanism which has been and still is a very important channel for procuring employment, more so than registration in INEM.

Although the number of job-seekers who approached or approach the companies directly is lower than the figure registered in INEM, it is a fact that the number of contracts obtained through the former channel is larger. 17.1% of all employment obtained in the last few years was achieved through this channel. Indeed, it is a mechanism with a high degree of real effectiveness for the job-seeker who makes use of it.

The jobs obtained directly from the company have an acceptable level of approximation with the professional category of the job-seekers - 62% feel that there is a match.

On the other hand INEM's failure as a placement agency has been quite evident; although it is one of the main job-seeking channels for the population, a very small part of job-seekers have used or use INEM as a real means of looking for a job, or use it only as a purely formal requirement.

However in favour of INEM it should be noted that INEM together with the study centres is that channel which provides the jobs which are best geared to the professional category of the job-seeker.

The selection processes

The main point to be noted here is the absence of a selection process for a large number of the recruitment.

Four out of six recruitments are undertaken without any selection process whatsoever. The main channels of access to employment where no previous entrance test is required are family relations/friends and direct demand on the part of the company.

If selection processes do exist, the most frequent is the personal interview, a test which 36% of the persons employed in the last five years had to undergo.

Selection tests are more frequent in the case of medium or high-level jobs, such as in public administration, particularly in the case of permanent or long-term jobs when the access path is through the study centre or the employment agency.

At the moment of defining the personal characteristics which promote recruitment, more than one quarter of the recruited persons in the last five years felt that there was no specific personal characteristic which the company particularly appreciated; this response is more frequent when the mechanism for obtaining employment was family relationships or friends.

In the majority of the cases, however, there are elements which are desired by the company, so that even if they are not specifically part of a recruitment policy, certain orientation criteria clearly exist.

The characteristics most desired by the companies, in the opinion of the recruited persons, were the following in order of importance: work experience, general education, personal character, sex and age.

In any case, work qualification in the broad sense, i.e. vocational training and work experience, was a determinant in 50.1% of recent recruitment.

The fact of having additional training was not considered in general to be a factor which was appreciated or which determined the recruitment.

The recruitment channels used by the companies

According to the study, the specific analysis of the recruitment channels used by the companies generally reflects the absence of authentic recruitment policies in the companies of Vitoria-Gasteiz. There is practically no systematic action directed towards the recruitment of staff. Recruiting activities take the form of informal procedures or formal steps which, however, are undertaken on an ad hoc and sporadic basis depending on the circumstances, and are not incorporated in a long-term structural logic of recruitment.

In general, the same aspects which were identified in the analysis of new recruitment in the last five years were also to be found here. It should be stressed how important informal relations are at the moment of recruitment - 82% of the surveyed enterprises make use either sporadically or systematically of personal knowledge at the moment of recruiting.

Among the motives which the companies stated for using one or the other channel of recruitment, the following are important:

- The policy of promotion and of offering opportunities to staff seems to be the fundamental element underlying the policy of internal promotion.

- The rapidity and the ease associated with recruitment undertaken via INEM is the fundamental explanation for recourse to this institution.
- The access to study and training centres is established in collaboration agreements or in the perception that the persons trained in these centres are well prepared for the job.
- Specialization is the main factor which induces the companies to make use of employment agencies.
- Advertisements in the press are considered to be most useful for the speed with which they enable information to be acquired on many candidates trained specifically for this job, and the ease of obtaining data for the preselection of candidates.
- Finally, trust and guarantee of good work are the main arguments in favour of recruitment via personal relations.

With respect to the socio-demographical attributes of their future employees, companies prefer to recruit persons below the age of 25 for their unskilled labour, for the staff in "other services" and, to a lesser extent, for their administrative personnel. In the case of recruitment and executive staff, and also to a certain extent skilled workers reference is given to persons between the age s of 26 and 39.

With respect to sex, women tend to be disregarded in the recruitment of workers, medium-level staff and higher-level personnel. In fact, women give a certain degree of equality only in the recruitment of administrative personnel and staff for other service occupations.

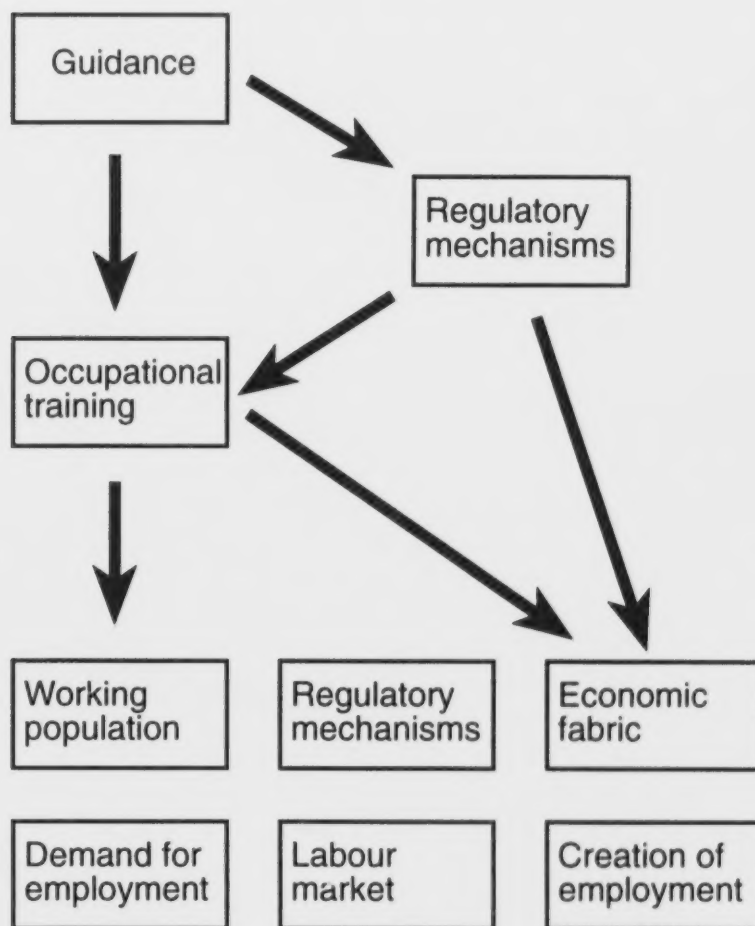
The demand for previous job experience is becoming more and more pronounced in the companies in Vitoria-Gasteiz. In most firms previous work experience is a secondary aspect only in the case of administrative personnel, unskilled workers and staff for other service occupations.

As for selection processes, the individual interview and the probation period are the two methods mainly used for selection and integration of new workers into the company. Psycho-technical tests play an important role for medium-level and administrative staff.

Objectives of occupational training

The conflict between the objectives of Occupation Training as a support during unemployment or a social service or investment in human capital and development, is an insurmountable constant factor within an economic structure which is unable to generate resources for the population as a whole. In our programmes the objectives co-exist and demand also follows the two objectives, even though it is evident that at the present time of economic crisis the lack of public resources are a constraint on the social service aspect.

We do not intend to enter into a discussion whether our insertion system presented in the following figure is adequate, nor do we wish to discuss the contents of the training programmes. We simply wish to present a brief outline of our concept to draw up a hypothesis of how it is used by the people.



The most developed instrument in our case is that of occupational training in parallel lines, firstly, occupational training for insertion in the labour market and secondly, anticipatory occupational training. There would be a third line which we will call retraining but this is very poorly developed at the moment although we believe that it will increase substantially in the short term.

Programming the contents calls for sound knowledge of the local labour market and its general trends; to this end, we are developing an urban socio-economic information system which will enable us to acquire organized, updated data available according to the needs which arise.

Training not only require a proper programming, its contents are also linked to the local economic fabric, which not only means that information is required but that there should be a permanent contact with the local economy via exploratory investigation; a link with the direct users is also necessary, not only in terms of their previous training and work experience, but also in terms of their work expectations, which means that vocational guidance will be required in many cases.

To sum up, an activity which at the start is essentially one of training has to be complemented by an activity of collecting information in various directions and with specific contents.

The use of our occupational training

The activity which at the outset was a scheme for young persons seeking their first job, has now undergone a major diversification. At present not only youth are involved, they are not only drop-outs and they are not just seeking an outlet. Analysing the requests for information on the training programme we find that, in the first four months of 1993, the average age is about 25 years (24,9).

At the beginning there was a connection between failure at school and unemployment, but the current demand is highly diversified with respect to level of education and has a substantial share of higher studies.

In this context we are providing additional information to a population which is fundamentally unemployed but which fundamentally tends to remedy this possible mis-match between its training and the demands of the labour market.

As we have seen, however, demand is not sufficiently well defined to speak of a match between the profiles at the moment of leaving the educational system and existing occupational profiles. Nor can we speak of a mis-match because in reality the level of non-definition of occupational profiles is very high.

Current approaches to occupational integration

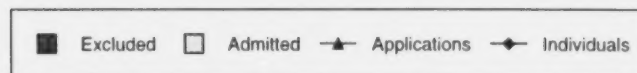
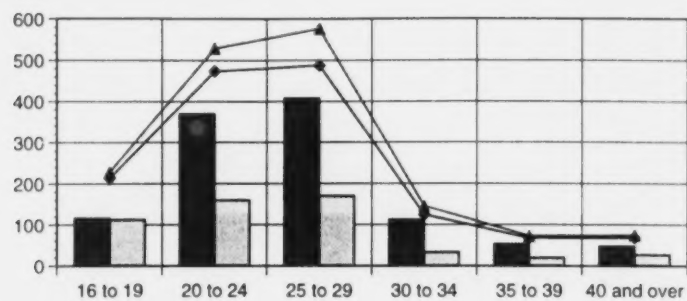
The evaluation system we selected was a longitudinal follow-up of the users of our services. This system was only been in operation for a short time but the first results, of which the data given above is only a partial example, have led us to review occupational training because it may be assumed that, on the whole, it is not efficient enough.

As our users are mostly persons who have skill training, it is probable that, in addition to the fact that the structural conditions on the labour market are not good, they also do not have the ability to design strategies for insertion into the labour market.

Without discarding the mechanism or complementary training as an aid for the elaboration of these strategies, it is necessary to extend it or integrate it in a broader system which will give the people a better understanding of access channels and real demands; at the same time it would be desirable for the companies to review their definition of human resource policies which would make it easier to obtain identifiable occupational profiles. It should not be forgotten that the economic fabric of our town is founded on small and medium enterprises and, as we have seen, there are no clear policies in this respect.

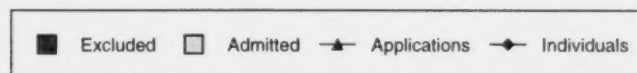
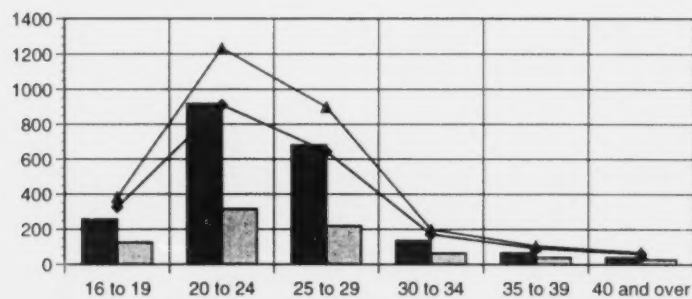
The path which has been followed to give flanking support to training is that of developing a socio-economic information system in the town in which the labour market plays a key role, together with a system of relationships with the world of industrial activity which we call exploratory investigation, and a vocational guidance system which will make it possible to match the information provided to the needs of those seeking this information.

Age-Groups Programmes in 1991



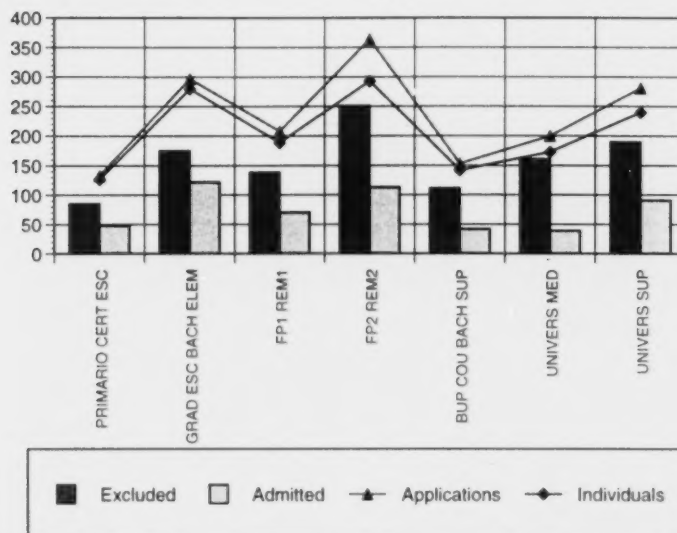
Excluded	116	369	407	113	53	48
Admitted	113	160	170	33	20	27
Applications	229	529	577	146	73	75
Individuals	214	474	488	125	68	68

Age-Groups Programmes in 1992



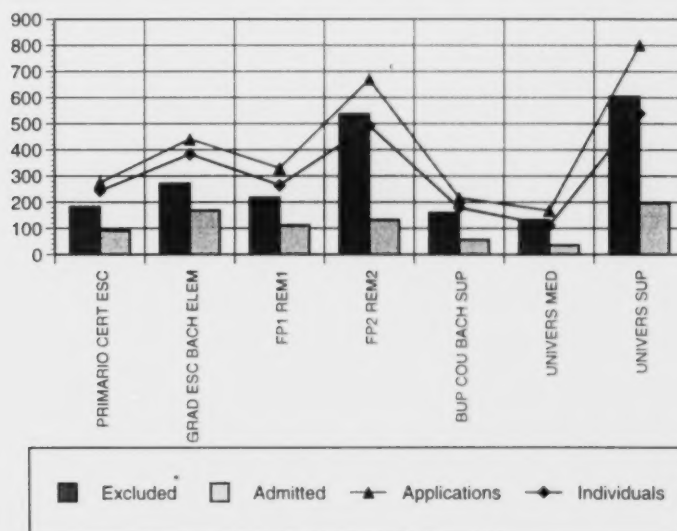
Excluded	258	918	681	135	66	40
Admitted	126	316	219	65	41	29
Applications	384	1234	900	200	107	69
Individuals	328	911	644	173	92	61

Educational level Programmes in 1991



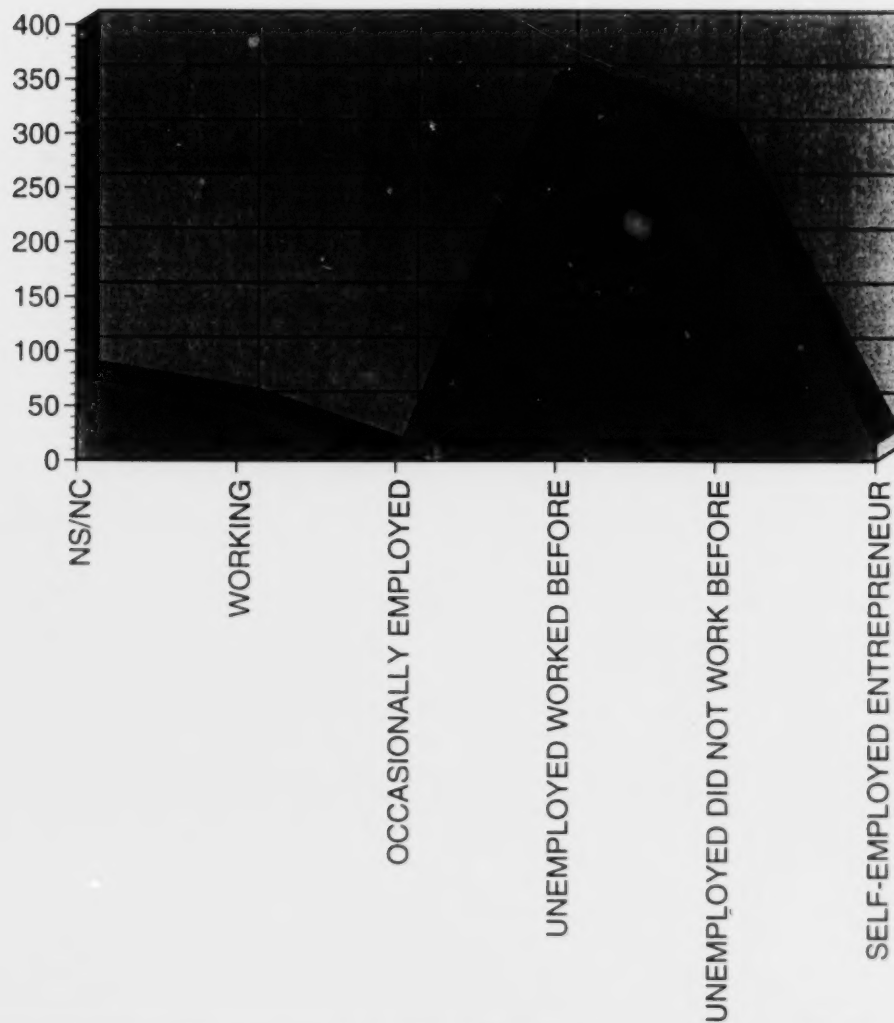
Excluded	85	175	138	251	111	161	190
Admitted	48	122	70	113	42	39	91
Applications	133	297	208	364	153	200	281
Individuals	127	280	189	293	142	173	240

Educational level Programmes in 1992



Excluded	183	272	218	537	160	133	604
Admitted	92	169	112	133	57	36	197
Applications	275	441	330	670	217	169	801
Individuals	244	384	265	492	180	112	540

**Work situation
Entries in 1991**



Entries	77	52	3	352	294	17
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Session 4

The process and consequences of education differentiation

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Summary report

I will start with some comments on the problem area that in my view is envisaged by the topic of the present session: "Process and consequences of educational differentiation". In the second section I will then try to locate the contributions prepared for this session within this problem area and discuss some of their conclusions.

1.

What does educational differentiation mean. In my view differentiation is the set of characteristics of a country's educational system relating first to the structure of the various established educational institutions and pathways and secondly relating to the distribution of the population according to these courses and pathways. It is common to distinguish at least a vertical-hierarchical and a horizontal-functional dimension of educational differentiation. In the vertical dimension differentiation can be understood as the range in the amount of education which different individuals receive, for instance, the span between the education requested as a social minimum from every citizen and a top-level academic education that only a few students obtain. This range is typically divided into institutionally defined and socially recognized packages or levels of education. Increasing vertical differentiation in this sense can occur for instance through the introduction of more examinations at various successive steps in the educational career which testify to ever better grades of achieved education. But there are several other possibilities of vertical differentiation. One is the ranking of educational institutions according to some socially recognized hierarchy of prestige or supposed teaching quality or other criteria. It is also an instance of vertical differentiation if students are ranked according to their performance in examinations and if this becomes a form of public mark. But in a brief formula I would say: *Vertical differentiation primarily relates to the varying quantity of education and its division into socially recognized packages.*

Horizontal or functional differentiation, on the other hand, refers to the division into qualitatively different tracks of education that are intended to prepare students for different functional tasks. Examples might be the different sections in secondary education which lead to a proliferation of various kinds of baccalaureate, for instance, in the French secondary schools. Another example is the establishment of specialized vocational training programmes for particular occupations that emerge in the course of a more differentiated occupational division of labour. At universities and in polytechnical colleges as well, specialized study programmes are designed as a response to the increasing specialization of knowledge and of its application in the technological mastering of the world and in the specialization of services provided by an increasing number of different professions or semi-professions.

The distinction of a vertical and functional axis alone is probably too simple because these dimensions may interact with each other or combine with other forms of differentiation that cannot be adequately captured by the horizontal-vertical cartesian space such as between different varieties of private and public institutions or the many forms of specialized firm-specific training courses. Specialized education of the most divergent kind is also invented for various types of personal handicaps or in response to labour market problems of specific population groups, for instance in order to facilitate the integration into the labour market of youth, of the unemployed or of women who try to catch up after a period spent in the family.

In yet another important sense the degree of differentiation of the educational qualifications of a population can change even if the set of educational courses, study programmes and examinations remains constant. Different degrees of differentiation can occur as a consequence of a *changing distribution* of the population among the constant set of educational programmes. In period one, 80 % of the population may have acquired but the social minimum of compulsory schooling and only 20 % have obtained one of the various more advanced levels of education. In period two the distribution may be reversed. 20% have compulsory schooling only whereas 80% are distributed among the various more advanced levels of education. In period two the educational distribution is more differentiated even if the structure of educational programmes has not changed at all.

Whatever the adequate dimensions of differentiation may be, an important task is to map the crucial developments in educational differentiation, to show in which way they are connected or cluster, and to attempt to understand why the various forms of differentiation occur. In the long run, it is certainly the case that educational differentiation has increased. But we should identify more precisely which dimensions of differentiation have changed and in exactly which way. Not all dimensions of differentiation may change in the same direction. Even within one dimension there may be changes in opposite directions that compensate each other.

The distinction of various forms of differentiation is crucial because different kinds of differentiation may have different consequences. The effects of differentiation in one dimension may depend on the state of differentiation in another dimension. The discussion by Breen and Hannan of the specific pattern of differentiation in the Irish Educational System is an excellent example of this. It shows that we need to consider the entire pattern of educational differentiation in order to understand the labour market consequences of specific attainments in the Irish educational system.

With regard to the consequences of educational differentiation it is sensible to distinguish the more or less *direct effects* of education on individual capacities and skills on the one side and the *mediated social consequences* on the other side.

As schools teach various things education can be assumed to have different immediate effects depending on the kind of curricula which students follow. To mention only a few such supposed direct effects of education:

- Education provides students with **general basic skills** such as reading, writing, arithmetic and general cognitive skills such as understanding information, logical reasoning ability and information processing.
- Education provides students with more **specific instrumental skills** such as accounting, computers, or learning foreign languages or the specific techniques of a craft.
- Education provides **knowledge** of different kind (about facts (or what is taken as fact), theories, interpretations e.g. in history, geography, politics, physics).
- Education includes **socialization** in values, norms and social behaviour more or less accepted in a given society. Socialization occurs openly through specific subjects taught at schools, but even more important are probably the latent ways of socialization through the hidden curriculum (Fend *inter alia* 1976; Bowles and Gintis 19 ;Bourdieu).

Depending on the precise constellation of the vertical and functional differentiation students who follow different routes through the education system exit it with rather different knowledge, basic skills, instrumental abilities and values¹.

In the context of this conference such direct effects of education are of particular interest as far as they are responsible for varying productivity of workers and as far as differences in productivity of the workers lead to different employment opportunities, career progressions and financial returns to education.

The *mediated* social consequences can be more or less independent of these direct effects on the skills, abilities and the productivity of the specific individual. One important mechanism for the social mediation of education occurs through the *social meaning* that is attached in different societal contexts to the acquisition of specific kinds of education. In the relationship of education to the labour market this aspect has been discussed mainly with reference to the *certificates* and *credentials* that are provided by educational institutions (Weber 19; Collins 1979; Arrow 197; Spilerman 1990). Certificates and credentials testify to the acquisition of

particular sets of skills and knowledge. However, as we know, it is not clear which certificates and credentials are indeed used on the labour market. They may be used as signals for learned cognitive or instrumental skills and vocational abilities by potential employers. But they may also be used as an indication not of specific skills and abilities but of more general characteristics of potential workers such as intelligence, motivation or trainability for work tasks that are not taught at schools (the omitted variable problem). They may be used as general indicators of productivity and efficiency or even as indicators of social skills, social contacts, commitment to organizational aims (Collins) or extrafunctional qualities (Dahrendorf, 1956) such as obedience or discipline. They may also function as formal prerequisites and entry barriers to specific professions. Thus in many ways they have effects that are more or less independent of the actual knowledge and skills of the possessors of the credentials (Collins, 1979)². As they are socially overloaded it is evident that their function may vary considerably from society to society. Depending on the use that is made of credentials in different societies differentiation of education and its certification through credentials may have different individual and social effects and it is not at all straightforward to generalize findings from one societal context to another.

Raymond Boudon in particular, but many others as well have drawn our attention to an other important aspect through which the effects of education are socially mediated. At least to some extent, education is a positional benefit and this means: The returns to the level and kind of education that I have depends on the education that my competitors have. This is popular knowledge today. But although this hypothesis is part of the folklore on the consequences of educational expansion it is rarely established through empirical work, exactly how the relationship between the changing distribution and differentiation of education and its value on the labour market operates.

There is a further crucial difficulty to assess consequences of educational differentiation on the labour market. This results from the fact that labour markets have their own institutional structures and show various kinds of segmentation that have to be taken into account if one wants to understand consequences of educational differentiation for the labour market. Generally it is not just the differentiation of education and the distribution of education that varies between two periods to be compared or between two societies to be compared, but the structure of jobs available on this structured labour market changes as well. It is thus rather difficult to assess whether some observed changes in the employment opportunities of the holders of some credentials are the consequences of changing educational differentiation or of changes in the labour market.

Even if we limit the interest to consequences of educational differentiation on labour market outcomes the list of research tasks and problems to be solved is thus very large. Let me summarize only a few:

- What is the precise nature of educational differentiation? In which crucial dimensions do the typical socially and institutionally defined packages of education that can be obtained in an educational system differ? In which way does educational differentiation change across time and in which way does it vary across societies?
- Which kind of individual knowledge, abilities and skills is produced through the various differentiated packages of education and how does this indeed affect the individual productivity in productive tasks?

How is information about these education packages interpreted by employers and for what purpose is it used in recruitment or promotion decisions or in salary designation? Is it used directly or only mediated through the real or supposed productivity effects of education?

To what extent do links exist between specific credentials and labour market positions such as for instance in some professions or in the civil service ?

To what extent do systems of educational differentiation and labour market segmentation practices interact with each other and produce nationally specific education labour market relationships?³ Adequate studies of the effect of various forms of educational differentiation indeed have to be comparative to a large extent. Since the kind and degree of differentiation are properties of the educational system the testing of the effects of such properties basically implies comparing different systems.

Considering these enormous tasks our knowledge is still almost minimal. In particular, in cross-national comparisons we have still to go a long way. But there are some promising first

steps. I would like to mention the pioneering study between France and Germany initiated by Maurice et al. that has stimulated some further French-German comparisons. We have Peter Blossfeld's conceptualization of various forms of differentiation in vocational education. We also have the work of Jutta Allmendinger (1989) in which she has studied the German, Norwegian and US- educational systems and analysed the effects of the varying forms of differentiation on the early stages of occupational careers.

Allmendinger has tested a number of general hypotheses on how the degree of stratification and standardization of the educational system is linked with characteristic patterns of the relationship between educational attainments and labour market outcomes.

Standardization is the degree to which the quality of education meets the same standards nationwide.

Stratification refers to the extent of streaming in the educational system and to the proportion of a cohort that attains the highest qualification level.

In standardized systems employers can rely on information given by standardized certificates and do not have to screen and/or train individuals entering the labour force. The effect of standardization should be a smooth transition between the school and work and a transition that implies less job shifts to achieve a good match. In societies with more *standardized* educational systems the variation in status of first job among holders of the same educational credential is smaller and in such societies we find less job moves in early careers and the job moves are more concentrated on the very first years of working life.

In more stratified educational systems the differences in the status rewards of education in the first jobs are larger and "the coupling between educational attainment and occupational status is higher" (Allmendinger 1989:245). More *stratified* educational systems lead to more distinct status hierarchies and educational credentials in more stratified systems have a more determined link to the status of first job.

2.

The papers prepared for this session led me to speculate about a further hypothesis on the consequences of different forms of educational differentiation.

In educational systems that are primarily hierarchically structured, labour market outcomes are strongly determined by rather distinct educational differentiations in the vertical dimension. In educational systems that are horizontally segmented the vertical dimension has not such penetrating consequences because the labour market outcomes also depend on the specific conditions in the labour market segment with which the educational specialities are mainly linked.

The paper by Breen and Hannan addresses the question to what extent Irish employers use and interpret educational qualifications and credentials "in making decisions about who to employ and how much to pay them". In particular the paper is interested in showing how responsive Irish employers are to distinctions in educational qualifications, whether they are responsive to very fine distinctions in qualification levels, such as type of examinations taken and grades obtained in these examinations or whether they use a much cruder categorization in making these decisions. Breen and Hannan investigate this question by analysing the employment rates and the wages obtained in employment as a function of the qualifications achieved and the performances shown in examinations in secondary education. The crucial question how carefully employers consider examinations and performances in examination is answered by systematically testing whether finer measures of education provide better predictions for the employment and wage prospects of school leavers.

The result of a very sophisticated and careful analysis is that Irish employers indeed make use of quite fine educational differences when making decisions who to employ and what wages to pay. Employment prospects and wages are not only better the more demanding the examinations are that school-leavers have past, but employment prospects and wages improve for small distinctions in the performance shown in these exams.

I think it is very important that the authors discuss these results in connection with several institutional peculiarities of the Irish educational system and the Irish labour market during the

period to which the data refers. The Irish secondary-level curriculum and examination system has a high degree of nationwide regulation and standardization. It has a single national curriculum for all subjects taught (with a significant number of obligatory subjects). The courses are general rather than (vocationally) specialized. The examinations are also standardized nationwide and it is a relatively simple system in the sense that more or less the same subjects are examined at a junior and at a senior level (intermediate level after the junior cycle and at the level of the Leaving Certificate after the senior cycle of secondary education.) Through its nationwide standardization and its clear and simple structure the results obtained in examinations can be interpreted as highly comparable throughout the whole country and the grades obtained can be interpreted relatively easily as measuring differential abilities. Since furthermore there is only a small apprenticeship system and there are only weak institutional links between education and employment the kinds of qualifications obtained in terms on subjects are less significant. It is thus understandable that, as Breen and Hannan conclude, "employers place little emphasis on the qualitative aspect of qualifications in the sense of specialities studied. The major differentiating effect of education is the quantitative dimension in terms mainly of the level of examination and the performance shown in it."⁴

Perhaps Breen and Hannan could go even further than they do in discussing the ways employers use certificates. I wonder if they would share the following interpretations. From their discussion and results it seems to me that in the Irish case certificates do probably not so much indicate specific skills and immediate productivity in a specific job, because the certificates and grades measure more *general* knowledge and abilities. But given the results that the principle differentiating factor is the *performance* at the examination and less the intermediate or senior level of the examination, I would be inclined to conclude that the certificates are not considered either as credentials in the sense of instruments of exclusion as Collins maintains. The employers seem to interpret them as indicating *general productivity*. And in this attribution the expectation that someone will do well in a task given to him - that is derived from a good *performance* in examinations - is weighted more strongly than the productivity expectation that is derived from a higher *level* of education.

I think that the contextualisation of the results referring to the specific character of differentiation of the educational system is very important. An educational system with another kind of differentiation may produce rather different results. An educational system that is more horizontally structured according to different subjects and in which the education-employment links are more institutionalized as e.g. in the German apprenticeship system the labour market prospect may differ much more according to subjects chosen and according to employment conditions in various industrial sectors than according to performances in examinations.

Although the results are not strictly comparable this hypothesis seems to be supported by the results of the paper by Dupont and Ossandon that relates to leavers of the technical branch of secondary education in an economically disadvantaged region (Hainot) in Belgium and which among other aspects also studies wages and employment prospects of these school-leavers. In Belgium the technical branch of secondary education seems to be strongly differentiated according to vocational subject areas and indeed the authors find rather strong differences between unemployment rates and wages according to the economic sector for which the various curricula are targeted. Thus the educational tracks oriented towards construction, industry and applied sciences seem to provide clearly higher wages than those oriented towards the hotel industry or economics. The rates of unemployment or of precarious employment also vary according to the subject area studied.

Karin Avremo-Notstrand and Ingegerd Berggren report findings from Sweden that point in a similar direction. In their analysis of employment prospects of graduates from occupationally oriented courses they also observe considerable variation in rates of employment and in rates of employment in the "proper" occupation (that is in an occupation that corresponds to their training) between different branches of vocationally oriented courses.

The hypothesis that in Ireland the differentiation of the educational system is such that the vertical dimension is particularly important for several aspects of labour market outcomes whereas in Belgium and Sweden horizontal aspects of differentiation may play a larger role cannot be confirmed definitively with the available papers because the crucial tests have not been made, but the papers indeed invite speculations in this direction.

The paper of Wim Groot and Hans Rutjes relates to the school-workplace mix in vocational education. It speaks of plans in the Netherlands as well as in other countries to reform the intermediate vocational education system from a formal education system to a system which resembles somewhat the German dual system. Groot and Rutjes discuss a number of

interesting hypotheses on the likely consequences of such reforms in terms of government interference with vocational education as well as concerning the likely consequences on the degree of equity and the degree of efficiency to be expected of such a switch from a more formal school-like system of vocational training to one in which firms play a larger role.

I cannot present here in full the argument that was propounded within the framework of the human capital theory which gives a number of interesting insights into the likely consequences of school-based and workplace-based types of vocational education.

Regarding the equity consideration, Groot and Rutjes argue "that firms probably vary more in the quality of training they will provide than schools. Firms also have a greater interest than schools in selecting the most trainable and (potentially) most productive individuals for the training programme and they also have better opportunities for attracting the better students (through salaries and career prospects). For all these reasons it is concluded that "from an equity point of view firm-related training programmes - such as apprenticeships systems and a "dual system" - are not to be preferred to a formal education system".

I think one can doubt this argument. It may be that firms tend to select more according to the supposed productivity of potential apprentices. But we also have to consider the demand side. Rather than to continue to sit in schools individuals with lower abilities and lower social background may have a higher motivation to take up workplace-based training that provides them with work prospects. In turn, this may result in a socially more equal distribution of training opportunities through workplace-based training programmes than through school-based training opportunities.

Groot and Rutjes also see disadvantages of workplace based training programmes in the efficiency dimension. The information about what has been learned in firms is less open and standardized than the information for school-type forms of learning. This creates information inefficiency. Groot and Rutjes also expect that in workplace-based systems there will be stronger fluctuations in training places offered over the business cycle and this will create an inefficient supply of trained individuals.

Thus, because of equity concerns and some of the inefficiencies expected from a purely firm-related form of training Groot and Rutjes strongly advocate that the state should not withdraw from formal vocational training. I would not principally object to the argument. The question is rather which is the best mix of school and workplace based elements in vocational education. With regard to the implementation of elements of educational institutions that seem to be successful in the context of one education-labour market system into another societal context (as for instance attempts to transplant the German dual system), it must be stressed that the successful adaptation of the transplant depends on many conditions of the systemic environment that cannot be supposed to be present everywhere⁵.

The paper by Rolf van der Velden asks in which way the segmented structure of educational differentiation according to the vertical level and the functional sector of education is linked to the various segments of jobs and occupations in the Dutch Labour Force. Van der Velden conceives the visible education-job links as an outcome of the competition of the graduates from different training courses for the jobs available on the labour market. He supposes that within the segments of jobs existing in the segmented labour market only a few training courses compete with each other and the paper intends to identify the clusters of training courses which in this sense compete.

Van der Velden expects three types of segments to be distinguished. His results clearly point to the relevance of the differentiation along the vertical and functional dimension introduced above: "The first type involves those where the emphasis is put on specific rather than generic skills. The substitution possibilities in these segments where people are screened on their general abilities are restricted to one sector of education but involve multiple levels. The second type involves the segments where people are screened on their general abilities rather than their specific skills. The level of education is therefore dominant but within this level substitution may take place between different sectors of education. The third type involves the segments ruled by credentialism. Here an exclusive relation between a training and an occupation exists and by rule there are no substitution possibilities" (p.9.).

Although the results of the analysis indeed reveal findings that support these expectations I tend to underline the reservations the author himself puts forward at the end of his paper. The fact that the education-job links are so far only analyzed for the complete Dutch labour force causes some serious interpretative problems. First, the results are an aggregate of the job opportunities of different historical cohorts for which the education-job links may have differed.

They also result from the aggregation of the opportunities of men and women. This problem perhaps could be solved by cohort- and gender-specific analyses. But there is a second problem: From cross-sectional data we cannot know in which way the observed education-job links come about: through initial job placements of the holders of specific education or through education specific career progression or through some combination of both. If we want to study the job competition between holders of different training courses, ideally we have to study the processes and occasions at which the education-job matches occur: either through studying recruitment or promotion practices of employers or by studying the insertion of individuals of different education into jobs or their differential progression in job changes.

As a general point I would like to stress that the papers prepared for the session allowed me to discuss only one aspect of the consequences of educational differentiation: the consequences for differential opportunities on the labour market. Various other aspects have more or less been neglected, for instance, the consequences of different forms of educational differentiation for the inter-generational transmission of advantages, the consequences for a more or less equal distribution of the goods of education among the population or the consequences for competition of national economies on world markets.

Notes

¹ As we know it is not at all easy to assess such direct effects of education and the variations that are induced by educational differentiation. What we consider as effects of education may simply reflect pre-existing differences (in ability, intelligence, motivation or ambition) among children who receive different kinds of education. As in particular Hyman, Wright and Reed (1975) have discussed in their study on "enduring effects of education" variation in levels of education is connected with variations in other life experiences. These experiences may be indistinguishably confounded with effects of education. For example, education is related to specific intellectual and cultural activities that provide new learning experiences such as reading books. Different occupational careers resulting from different levels and kinds of education are connected with different opportunities and challenges to improve one's skills and knowledge.

² The relationship between the credentials and the characteristics which individuals gain through the acquisition of education is difficult to establish. Direct knowledge, for example, could produce the same credential and comparable knowledge could result in different credentials. Such variation in the significance of a given body of knowledge for credentials may be particularly pertinent in comparisons across societies. The credentials may be linked to specific rights, legitimate

claims, exclusionary privileges or professional treatment that differs from society to society.

³ Considering all this, what is the appropriate design of study for such questions. Is it sufficient to study the transition of individuals from school to work or do we have to take into account the qualification structure of the total labour force in order to understand at which points the new entrants are able to penetrate. Is it possible to understand the crucial processes from the perspective of school-leavers seeking employment or do we need more studies from the perspective of employers, for instance, studies of recruitment and promotion practices in firms and internal labour markets.

⁴ The strength of these educational and labour market outcomes may also depend on the fact that the youth labour market in the 80s was overcrowded with high levels of youth unemployment which helped the employers to make highly discriminating decisions for initial employment.

⁵ In this context see the interesting findings of an evaluation of the long-term consequences of attempts to introduce the German dual system in various developing countries. In some contexts these attempts were successful but not in others (Stockmann, 1992).

Transition from Education to the Labour Market for Young People in Sweden

Student follow-ups in Sweden

Statistics Sweden continuously carry out follow-up surveys of those who have completed a certain form of schooling. The aim of the follow-ups is to obtain an idea of "how things have worked out for those who have obtained a certain education", how different groups for different reasons have chosen varied ways through the education system and continued to working life, to provide knowledge about the effectiveness of the educational system and of the labour market policy.

Method of the surveys

The carrying out of a survey follows mainly the same pattern, regardless of the survey group selected. It is almost always a sample survey. The sample is usually stratified and the strata consist of, e.g., educational programmes, courses, regions, portion men/women. Within every stratum a widening of the so-called Hansen-Hurwitz plan is applied, where the sample is drawn in two phases. The first phase is an unrestricted random sample within each stratum, where each individual is sent a questionnaire. Another group is chosen for telephone interviews from among those persons who have failed to answer. Again this is done at random and without restriction. The number of answers received differ from stratum to stratum, but the mean value of non-response is about 20 per cent.

Seven- year longitudinal study

Our latest longitudinal follow-up survey of transition was carried out among pupils who left compulsory comprehensive school in spring 1988. The seven-year longitudinal study is carried out over a period of seven years after the pupils have left compulsory education. During this period data is gathered on three different occasions, in spring 1990, in spring 1992 and in spring 1995. We follow this cohort through various levels of schooling and into the labour market. This gives us a good picture of the ability of pupils to use the different systems and the systems' ability to provide for the needs of the young people. The investigations consist both of data collected from the youngsters themselves and data from administrative registers.

The same type of longitudinal follow-up survey has been carried out twice before, the first one among those pupils who left compulsory comprehensive school in June 1971 and the second one among the pupils who left school in June 1979.

In this report I shall give a short presentation of the results from the surveys which were carried out in the spring of 1990 and 1992, concerning the transfer to upper secondary education, transfer to the labour market and also make certain comparisons with the group of pupils who left compulsory education in 1971 and 1979. Before I present these results, I think it would be useful for the reader to become familiarized with the education system in Sweden.

The education system in Sweden

Compulsory school begins in the autumn term of the year a child reaches its 7th birthday and ends, unless completed previously, at the end of the spring term of the year of the pupil's 16th birthday. The nine-year compulsory comprehensive school is divided into three levels: junior level (grade 1-3), middle level (grade 4-6) and senior level (7-9).

Upper secondary education includes, for the time being, courses lasting 2, 3 or 4 years, as well as specialized courses of varying length. Specialized courses can be taken after compulsory school or after other secondary schooling. The integrated upper secondary schools normally cover the 16 to 19/20 age group from the 10th to the 12/13th year of education and training, including 3 and 4-year theoretical course programmes, 2-year theoretical course programmes, 2 and 3-year vocational course programmes and special vocational courses. From 1993 to 1995, upper secondary education is undergoing a process of change. All lines will be divided into 16 study programmes, all lasting three years, providing general eligibility for higher education.

Higher education activities in Sweden, post-secondary education, can be divided into two main fields, viz. undergraduate education and postgraduate education. Undergraduate education is organized into study programmes and separate single-subject courses. The programmes may be general, local or individual. The educational system in Sweden is shown in the enclosed diagram.

Transfer rates from compulsory comprehensive education

A great majority of the pupils in Sweden continued their schooling after finishing compulsory comprehensive school. Almost everyone, 98 per cent at grade 9 in the spring of 1988, applied for upper secondary education and 87 per cent were admitted. The rest of the pupils, 13 per cent did not continue their schooling in autumn 1988 but approx. 5-7 per cent continued their schooling later. If we look at transfer rates for male and female pupils, the proportion choosing vocational education is the largest, 71 per cent and 48 per cent respectively. General education was chosen by 14 per cent of men and 34 per cent of women.

A lot of pupils at grade 9 in the spring 1988 had a dilemma when choosing course programmes in upper secondary school. 47 per cent of the females and 32 per cent of the males were very uncertain and chose a programme which would not limit their future choice of profession. 25 per cent of the pupils chose a line because they wanted to study at university and 48 per cent of the males and 24 per cent of the females chose a programme because they wanted specific vocational training.

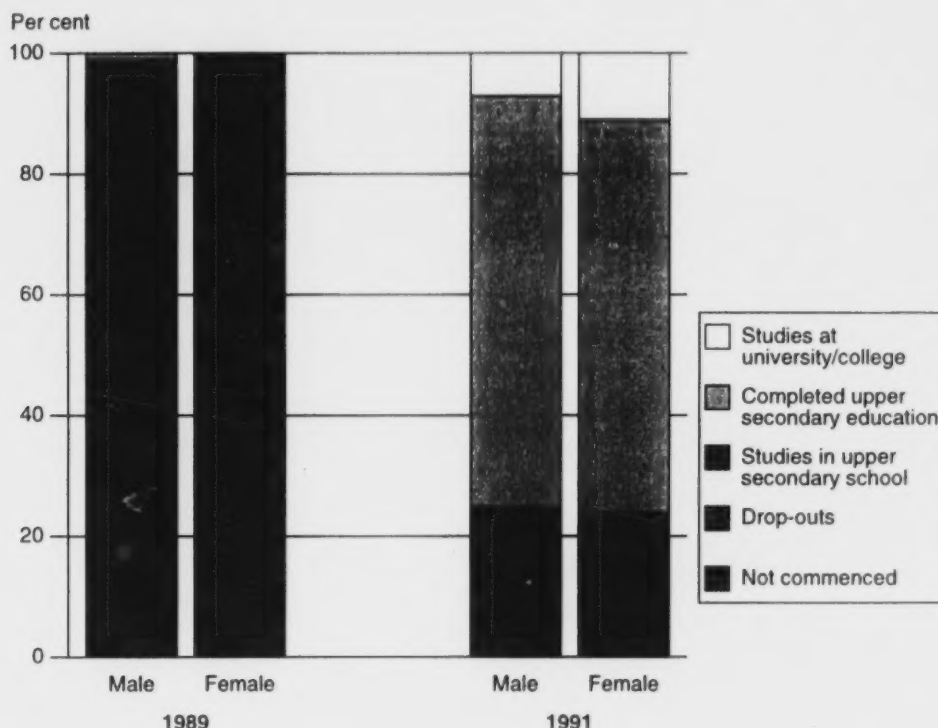
Diagram 1 illustrates the educational patterns of the pupils, who left compulsory comprehensive school in June 1988. One year after completion of their basic education, in the autumn term of 1989, 86 per cent were studying and 6 per cent had dropped out of their studies during the first year in upper secondary education (6 per cent had begun to study later than the autumn term of 1988).

The main reasons for dropping out of school were the wish to start working (52 per cent), 1/3 wanted to take some time off from the studies, many in order to study abroad for a year. Another reason the drop-outs often mentioned was that they were not admitted to their first preference of course programmes in upper secondary school.

Two years later, in the autumn term of 1991, the majority of the pupils (77 per cent) had completed their upper secondary education, 7 per cent were still studying in upper secondary education and 16 per cent had compulsory comprehensive school as their highest level of education. 8 per cent of the males and 11 per cent of the females had continued on to university/college for higher education. Many of the pupils who were still studying in upper secondary education took the 4-year technical course and thus had one year left of their ordinary education.

30 per cent of the males and females who had finished upper secondary education, or more than one half of those who had completed the 3-year theoretical course programmes, had begun or planned to begin studying at the university/college for higher education. 70 per cent did not want to continue on to study in higher learning. Among those, a majority of the women did not want to continue studying because of the subjects on offer, while the men just were not interested in university education.

Diagram 1 The educational situation of the 1988 cohort in the autumn term of 1989 and in the autumn term of 1991. (Per cent)



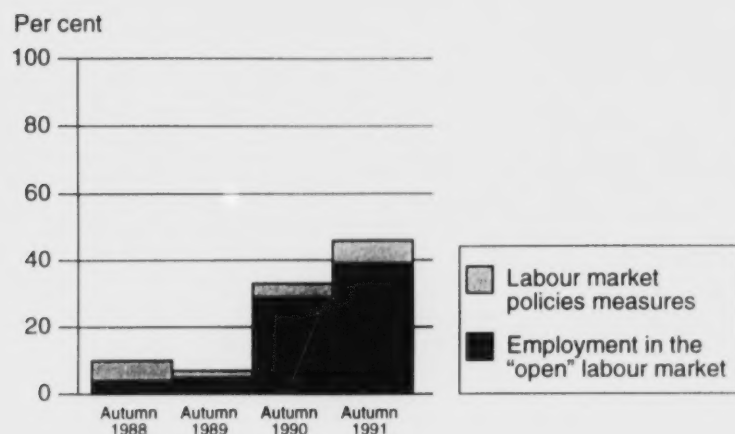
Transition into the labour market after compulsory school

Most of the pupils who leave compulsory school continue directly into upper secondary education and in the first two years after compulsory school studies are the main activity.

Diagram 2 shows the transition into the labour market for the pupils who left compulsory education in June 1988. In autumn 1988, 9 per cent of the pupils were employed, 4 per cent in the open labour market and 5 per cent in "youth opportunities". During the following year, the number of students increased and only 6 per cent of the total were working. In June 1990, the majority of the students in the 2-year course programmes graduated and in June 1991 most of the students from the 3-year course programmes as well. This resulted in an increase of the percentage share employed to 47 per cent in the autumn of 1991. 1/3 were studying and 6 per cent were unemployed. Thus, 3.5 years after compulsory education, just under half of the population of 19 year-olds in Sweden had entered the labour market.

One important reason for late entrance to the labour market is military service and studies at university and college for higher education. Of course, some of the young persons take part in activities other than studies, military service or labour, but they are quite few. In our next follow-up survey, seven years after compulsory school, we will obtain a more complete picture of the transfer from education to labour market. Up to now, you can only establish the fact that, for young people, education is a crucial factor for the time of transition into the labour market.

Diagram 2 Transition into the labour market autumn 1988 to autumn 1991 for pupils who left compulsory school in the spring of 1988. (Per cent)



Pupils who did not continue studying after compulsory education

The number of jobs not requiring vocational training have decreased considerably in Sweden over the last two decades. This is a natural development, considering the increasing educational level among people entering the labour market. The supply of trained workers led to rising demands of trained workers. Upper secondary education has become the standard of attainment and provides a sort of guarantee for "good" workers.

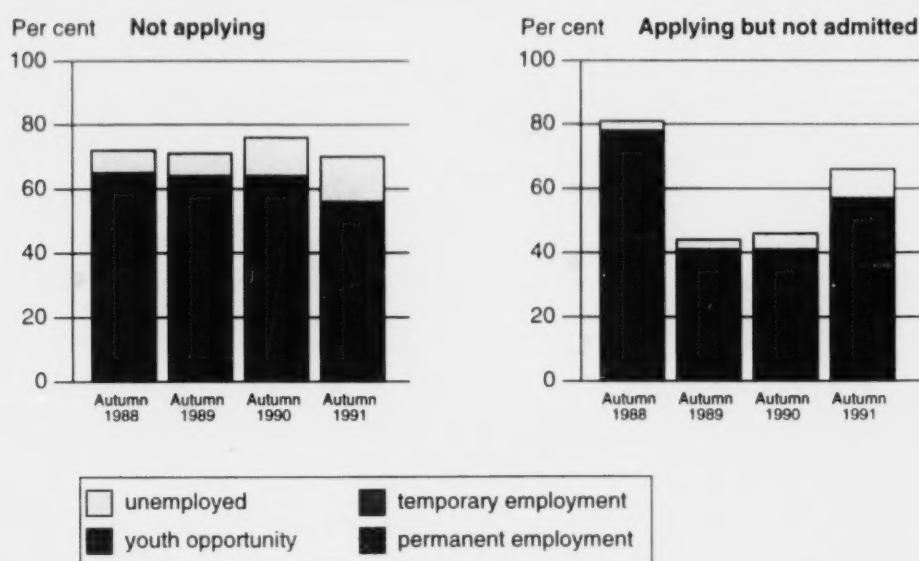
The school authorities are responsible for the activities of the 16-17 year-olds, even those who are not involved in studies. Since one of the major problems for these youngsters is their lack of education, most of the actions the community offers are continued education. There are, however, other measures, such as "youth opportunity", a six-month work experience placement paid for by the community.

Applicants and non-applicants to upper secondary education

13 per cent of the pupils did not continue their schooling in the autumn of 1988. When asked why, 7 out of 10 answered that they wanted to get a job. As mentioned earlier, the chances of getting a job are small. Since the mid-1970's, the proportion of 16-17 year-olds working in the open labour market have dropped from 24 per cent to 5 per cent and in the autumn of 1988, the most common employment was "youth opportunities" and thereafter stable jobs (diagram 3).

The main difference between those who did not apply and those who applied but were not admitted to upper secondary school was their attitude toward schooling. Already in compulsory school, many suffered from school fatigue. 36 per cent of those who did not apply for secondary education had had adjusted courses of studies at grade 9. The corresponding figures of those who applied but were not admitted was 10 per cent. In autumn 1989, only 20 per cent from the group of "not applying" had begun to study, compared with 50 per cent of the "applying but not admitted". The drop-out, however, was very high in both groups. 34 per cent and 19 per cent respectively had dropped out of studies two years later.

Diagram 3 Type of employment after compulsory school by pupils who did not apply or applied but were not admitted to upper secondary school in the autumn 1988. (Per cent)



Establishment in the labour market by different educational levels

The bridge between education and the labour market is an important indicator of the effectiveness and quality of the educational system. The importance of a smooth transition to employment as well as the benefits of earnings from work for young persons cannot be underestimated. It is also a paramount issue for the education system and labour market policies.

Establishing oneself on the labour market is a slower process today than was the case ten years ago. Many find a job quickly, but for others it takes a long time. However, sooner or later, almost everyone gets a job. On average, the transfer-period from education to labour market has extended during the last decade. 1/4 of those who left compulsory education in the spring of 1979 had a permanent job four years later. The corresponding figures among the school-leavers in June 1988 was 15 per cent. Table 1 shows the proportion of permanent jobs in the autumn of 1983 and 1992 according to different educational levels.

Table 1 Permanent jobs in the autumn of 1983 and 1992, four years after leaving compulsory school according to different educational levels. (Per cent)

Highest educational level	School-leavers in 1979 with permanent jobs in 1983	School-leavers in 1988 with permanent jobs in 1992
3-year theoretical course programmes	10	9
2-year vocationally oriented course programmes	30	23
Compulsory school	40	26
Total	25	15

Several parameters can be used as indicators to reflect entrance into the labour market for those leaving school, for example, whether one gets a job or not, the length of the period before getting the first job, how secure and stable the job is, whether it is a full-time job or not. In the follow-up survey in the spring of 1992, the activities of those who left compulsory school were measured every six months after graduation. The activities were divided into employment (permanent, temporary and labour market policies measure), studies, unemployment, military service and other activities.

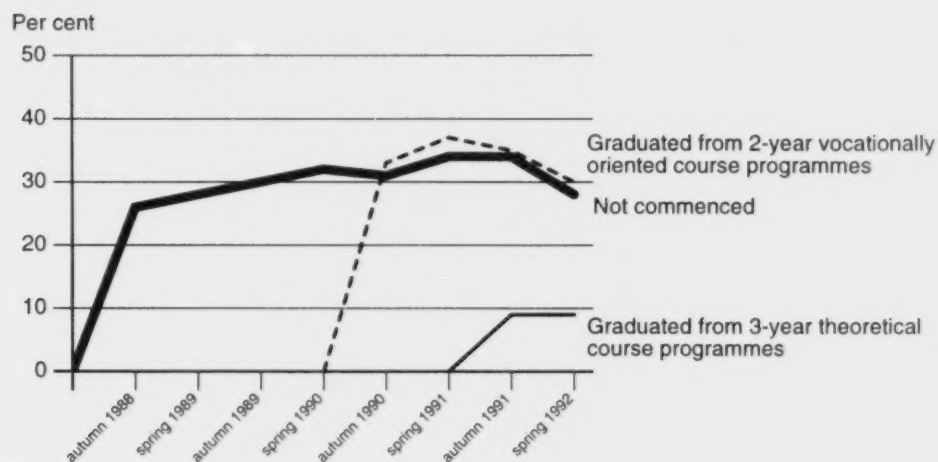
Diagram 4 shows the percentage share of permanent employment as the indicator of establishment in the labour market. 26 per cent of those who did not continue upper secondary education had a permanent job in the autumn of 1988. From 1988 to spring 1992, establishment rose very slowly and dropped by 6 per cent between autumn 1991 and spring 1992.

33 per cent of the pupils from the 2-year vocationally oriented course programmes had a permanent job in the autumn of 1990, directly after their graduation. One year later the percentage share with permanent jobs had increased to 37 per cent. Even among these there is a drop in the percentage share in the spring of 1992.

Those graduating from the 3-year theoretical course programmes ordinarily have a low percentage share which transfers from upper secondary education to the labour market. Men fulfil their military service directly after graduation and many of the others continue to study at university and do not enter the labour market until 3-4 years later.

Overall, regardless of educational levels, establishment in the labour market is low. In an economic recession, as was the case in Sweden from 1991 to 1992, the flow from education to the labour market slows down and, to obtain a more complete picture, we would have needed a longer period after compulsory school. In our next follow-up survey, seven years after compulsory school, we will hopefully accomplish this.

Diagram 4 Proportion in permanent employment every half year according to different educational levels. (Per cent)



Occupation in accordance with education

In the follow-up survey in spring 1992, data concerning occupation, type of employment, and whether or not the occupation was in accordance with the education, was collected. Table 2 shows the correspondence between education and occupation two years after graduation among those graduating from the 2-year vocationally oriented course programmes in June 1983 and 1990. The table also shows the differences in employment rates¹⁾ between 1985 and 1992.

Compared with spring 1985, the time of the latest economic recession in Sweden, the employment rate had dropped in spring 1992 among those graduated from every vocationally oriented course programme. The economic recession in 1992 has hit the technical-industrial sector and the building and construction sector of the economy hardest, while the public sector has not been affected to such a large extent. As the figures show, the employment rate has dropped only 2 per cent among those graduating from the nursing and welfare line, while those graduating from the metalwork course programmes, the electro-telecommunications course programmes or the motor engineering course programmes have lowered their employment rates by 12 to 25 per cent.

The employment rate does not correspond directly with the proportion of the employed working in an occupation according to their education. The employment rate among the graduated from metalwork course programmes or electro-telecommunication course programmes has dropped. On the other hand, the share of the employees who work in the "proper" occupation has increased 17 per cent among those graduating from the metal work line and decreased 17 per cent among those graduated from the electro-telecommunication line.

Table 2 Employment rate¹⁾ in the spring of 1985 and 1992 and proportion of the employed working in the "proper" occupation divided by different 2-year vocationally oriented course programmes. (Per cent)

Course programmes of upper secondary school	Proportion in the "proper" occupation		Differences in	
	1985	1992	"proper" occupa- tion between 1992 and 1985	employment rates ¹⁾ between 1992 and 1985
Nursing and welfare	90	84	-6	-2
Retail trade and clerical work	57	65	+8	-6
Food manufacturing	73	63	-10	-4
Metalwork	47	64	+17	-25
Motor engineering	46	60	+14	-12
Building and construction	74	89	+15	-6
Electro-telecommunication	61	44	-17	-18
Production and maintenance	59	51	-8	-25
Total	63	68	+5	-9

1) Employees divided by the sum of the employed and the unemployed

To use the correspondence between education and occupation as an indicator of the efficiency of the systems (educational or labour market policies) may cause problems. A low employment rate does not imply a higher share of the employees in the "proper" occupation or vice versa. The link between education and occupation needs to be considered. There are education programmes with a very firm link to the education, providing access to a special occupation, e.g. the medical degree. On the other hand we find education programmes that link to a wide range of occupations. Generally speaking, the weaker the link, the larger the influence of factors, such as the state of economy. With a large supply of labour the highest qualified may be employed, not the one with the "proper" education.

Unemployment by different educational levels

Although the relationship between formal education and unemployment is not straightforward and that "more" education does not present a panacea in combating unemployment, the unemployment rate may help to show that lack of education often is a contributing factor in unemployment within the present state of the economy in the country.

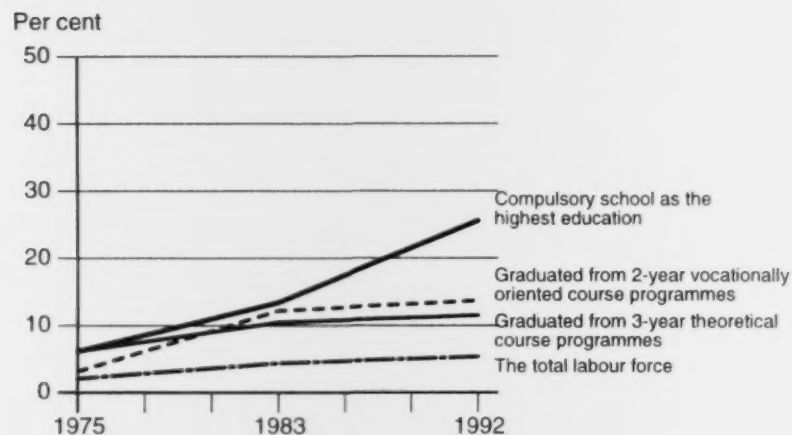
During 1975 Sweden's economy was booming. The unemployment rates were low and employment was at a high level. In 1983, the economy was declining and unemployment rose especially among young people. In 1992, the economy declined to the lowest level of the last five decades and youth unemployment rose to a paramount level.

Diagram 5 shows the distribution of relative unemployment rates¹⁾ in 1975, 1983, and 1992, four years after leaving compulsory school broken down by different levels of education. Young people with compulsory school as their highest level of education had the highest unemployment rates during the period 1975 to 1992. In 1983, a growing proportion of unemployed is noticeable and in the deep economic recession in 1992 "the gap" has widened between those with or without upper secondary education. The percentage share of unemployed has increased rapidly among those who have not attained any education above compulsory comprehensive school.

Less influenced by the shifting state of the economy are the graduates from 3-year theoretical course programmes. The unemployment rate increased from 6 to 11 per cent during this period. As mentioned before, many of the graduates from these course programmes study at university or college for higher education after upper secondary school and in an economic recession a larger proportion of the graduates choose continued studies rather than become unemployed.

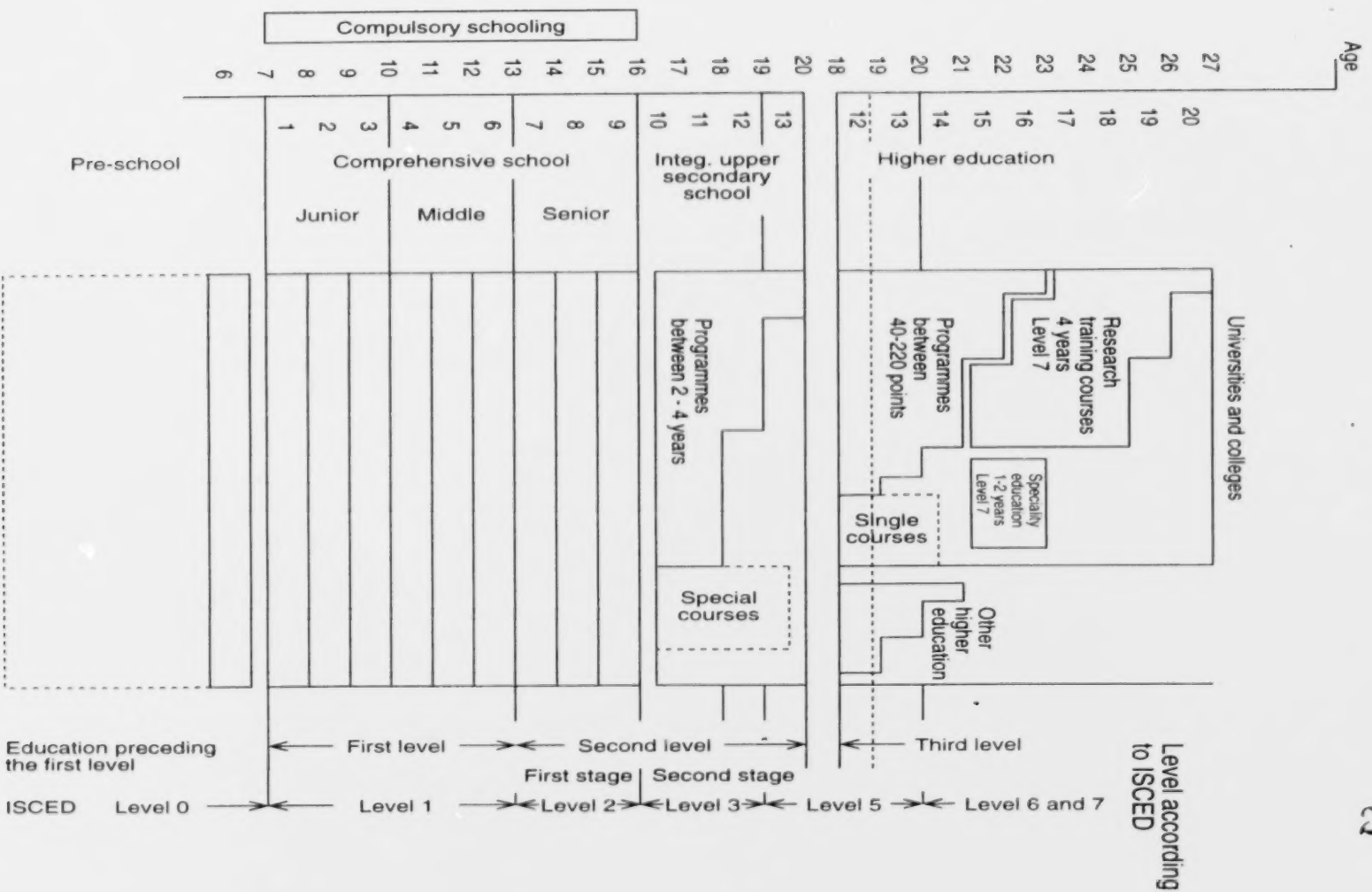
Finally, one can observe that young persons about to enter into the labour market are very affected by the state of the economy compared to the established labour force.

Diagram 5 Relative unemployment rates¹⁾ in 1975, 1983 and 1992, four years after compulsory school broken down by educational levels. (Per cent)



1) Unemployed divided by the sum of unemployed and employed

The regular education system in Sweden



Secondary technical education qualifications

An audit

Introduction¹

Young people are leaving the Belgian school system at ever increasing ages and at higher levels of training than in the past. Increasing numbers of young people are finding themselves in the no-man's land between two worlds: school and the labour market.

It is a time of waiting, a point of transition. Today, new crossovers and periods of transition are occurring between the end of school and the start of working life (Rea A., Pjetri J., Hublet B., 1990).

The recession has focused increased attention on the problems of employment and the difficulties of using juvenile labour.

Of course, like it or not, life is punctuated by a succession of implicit or explicit selection processes, whether sought by us or forced upon us.

While selection acts at the individual level, it can also be encountered at the level of social structures:

- the family selects a set of particular values;
- school makes a distinction between the talented and those without talent;
- the labour market imposes a separation between the active and the non-active.

Indeed, the education system applies a sorting process based on educational failure and disengagement; the social system in turn applies a filtering process which is all too familiar to us: unemployment or forced inactivity, which has become a scourge of industrialised countries.

Young people do not form a homogeneous population - far from it. To speak of young people as a social unit, an established group with its own shared interests, and to attribute these interests to a biologically defined age, is already a form of patent manipulation (Bourdieu, P., quoted by A. Rea, 1990).

The same applies when it comes to analysing the vocational integration of school-leavers because, even with an equivalent certificate or diploma, they experience varying difficulty in finding a job. Already on leaving the school system, they do not all travel the same road, i.e. they do not all go off in search of paid employment.

Thus, in a period when jobs are hard to find, it is natural to concentrate on the indicator which serves most dramatically to characterize the crisis: unemployment. Even so, forced inactivity cannot alone fully reflect the complexity of the situation since, for those who find a job immediately after obtaining their diploma, the risk of unemployment is still present and the jobs on offer often carry a high degree of insecurity. Thus the problem of vocational integration must be considered in terms of its dynamic.

The routes taken by young people on the market examined in its entirety highlight the prolongation of the period of vocational integration and transition, i.e. the period between their initial training and integration in a stable job. This prolongation, being a structural phenomenon rather than one determined by the economic cycle, affects all young people, not just certain specific categories considered "most vulnerable".

In concrete terms, the entry of young people into active life does not depend exclusively on levels and types of training but on a range of socio-economic criteria seen as the end-result of a long series of selections imposed first by the education system, then by the labour market.

1. The theories ... The basis of the audit.

During the 1960s, the western economies were in full spate of growth. It was essential to promote an education system which would satisfy both aspirations for course democratization and equality of pay and the imperatives of economic development.

This period coincides with the birth and spread of the neo-classical theory of human capital and its conception of employment and unemployment (Eicher, J. C., 1973, 1974 and 1975). This approach enjoyed spectacular success at a time when the growth of economies made it possible to absorb, without too much difficulty, the waves of school-leavers pouring onto the labour market.

In particular, with its view of education as a form of investment mobilizing scarce resources, the human capital theory did much to popularize the notion that the hierarchization of educational routes depended on the situation in the supply and demand of skilled labour on the job market.

This model postulated not only the absence of institutional constraints on the free play of market mechanisms, but also the existence of universal laws applicable in an identical manner to all individuals, irrespective of social origin, sex and relationship patterns. Moreover this theory placed individual freedom of choice at the centre of the analysis: in an ideal economic world in which all the conditions were present for the market alone to regulate supply and demand in skills, the individual had sole responsibility for his vocational future.

On the basis of empirical studies, often motivated by the need for political action, the first critiques of the traditional single model of the operation of the labour market emerged.

Indeed, many economic and social studies were casting light on a fragmentation of the labour market into a multitude of "segments" or sealed compartments for which it was difficult to discern any generally applicable rules of operation.

All this research sought to study the factors of discrimination, whether institutional or in some other form, which condition the aspirations and behaviour of individuals or social groups confronted with selection mechanisms on a labour market which was not homogeneous along the lines of the classical theory, but compartmentalized.

This fragmentation is accompanied by a disintegration of the social corpus into a multiplicity of sub-categories of insecure and part-time employment in which recent school-leavers and women form a majority.

The general hypothesis is as follows: the fragility of vocational integration is quantitatively significant. Moreover it is by no means identical for all categories of school-leaver. In fact, vocational integration depends on the type of diploma, the sex of the diploma-holder, the work performed and the sector of economic activity involved, but also on the social origin of the diploma-holder. This training-employment analysis thus addresses the overall functioning of the labour market. In particular, it considers the matching of school-leavers, whose training is only a secondary element in their characteristics, to jobs which exist within the economic context inhabited by them. In concrete terms, our objective is to demonstrate that the unit of analysis here is not the individual and his freedom of educational and vocational choice, but rather groups confronted with objectively different social and occupational situations, which condition their aspirations and motivations, while at the same time limiting the range of choices really open to them.

2. Presentation of the survey.

Our aim is to describe a population of ex-students holding diplomas of technical secondary education and to attempt to explain their situation on the labour market by a longitudinal analysis of projections at the conclusion of their studies.

We feel it important to stress at the outset that:

1) this analysis forms part of a series of other studies conducted by INAS aimed at plotting the vocational integration of students completing higher education courses (university and non-university) (Dupont P., Ossandon M., 1990, 1991). These studies will shortly be rounded off by an analysis of the vocational integration of persons with few, if any, educational qualifications assisted by the vocational guidance and placement services;

2) the analysis presented had to overcome a certain number of difficulties; in fact, the students surveyed are poorly equipped in intellectual respects, despite having completed courses of technical secondary education;

3) whereas the previous studies sought to document the vocational integration of ex-students throughout the French Community of Belgium, we deliberately centred the present study on a single province (Hainaut), for two reasons:

■ firstly, the obvious cost of a wider survey;

■ secondly, and this is clearly important, because Hainaut is regarded by the EEC as a "stricken" area from an economic point of view (it has unemployment running at close to 30%); we thus felt it would be interesting to observe how a population of students leaving school in 1987 in this area of under-employment had fared on the job market over a period of 42 months following the award of their diplomas (from July 1987 to December 1990). However, it should be noted that our sample was analysed before the scale of the phenomenon was exacerbated still further by the current recession.

We made postal contact with educational establishments offering courses of technical secondary education and asked them for lists of students in the following training sectors: applied arts, construction, economics, hotels and catering, industry, applied sciences and personal services. Favourable responses were obtained from 76 out of a total of 124 establishments (a 61% response rate). In fact the schools which did not respond award the same categories of diploma as those covered by our sample, which confirms the representative nature of the target population as a whole.

Launched in April 1991, the survey was to cover a population of 1,498 diploma-holders and to elicit 768 usable responses, representing a 51.26% response rate. The table below gives a brief description of the respondent sample.

Table 1: Rate of response per diploma category

	Questionnaires sent	Responses received	Rate of response
Applied arts	106	45	43.5%
Construction	87	45	52.2%
Economics	483	234	49.4%
Hotels and catering	56	28	50.0%
Industry	481	265	56.5%
Applied sciences	97	46	48.5%
Personal services	188	105	58.3%
Total	1,498	768	51.3%

At a 1% threshold, the responses received can be considered representative of the original population. Even so, two additional remarks are called for:

1) Although the response rate is relatively high, the representative nature of the results is limited to the respondents. There are no grounds for extrapolating the questionnaire findings to those - nearly half - who did not respond, since the reasons for their non-response were not analysed;

- 2) Our observations rather reflect main tendencies, in particular by type of diploma, and do not take account of patterns peculiar to certain individuals which constitute exceptions. The results of this survey must be interpreted in the light of the constraints indicated.

3. Analysis of the main results.

The abundance of the information gathered and the need to simultaneously process the multitude of variables coming within the scope of the study militated against the development of a model at the outset without the risk that certain major explanatory relations might be overlooked. This is why we opted for a deductive statistical method and chose factor analysis of correspondences².

The first three factors extracted, which represent the dominant combinations of the 82 characteristics (19 variables) selected and 768 individual observations (see annex), cover almost 84% of the total variance of two sets of points, i.e.

- 44.31% for the first factor,
- 23.27% for the second factor,
- 13.85% for the third factor.

3.1. Interpretation of the factorial axes.

The first factor centres essentially on characteristics relating to the status of the diploma. Referring to Figure 1, we note that the characteristics "clerical worker" (P02) and "teacher" (P03) feature among the positive values whereas that relating to individuals employed as manual workers (P01) appears among the negative factorial values.

Thus, for school-leavers working in clerical occupations (P02), family connections or family help are highlighted as the most important factors in securing a job. Conversely, those employed as manual workers (P01) attach great importance to work experience (14Z) as a means of obtaining their first job.

It may also be noted that women appear mainly on the clerical side and men on that of manual workers.

In the upper part of the axis we also find school-leavers who had never had a job (E01) and those who were looking for a job at the time of the survey (EM3). Lower down, we find individuals who had had more than three jobs (EO3), often on a part-time basis (EM2).

The second factor introduces a separation in terms of social origin, as defined by the occupation and standard of education of the school-leavers' parents.

Figure 1 places school-leavers from relatively well-to-do backgrounds among the positive values. The parents hold higher secondary qualifications (DP4 and DM3) and the fathers have white-collar jobs (PP3).

Among the negative factorial values, the parents hold certificates of primary education (DP2, DM2) and the fathers served as apprentices (DPI). The fathers work in self-employed occupations (PP5).

The axis introduces a separation based on social origin which matches up with the clerical or manual worker status of the school-leavers. We also observe a separation of respondents according to sex. Thus, for our sample, the majority of male diploma-holders are of relatively modest social origins, whereas their female counterparts tend to be from more well-to-do backgrounds.

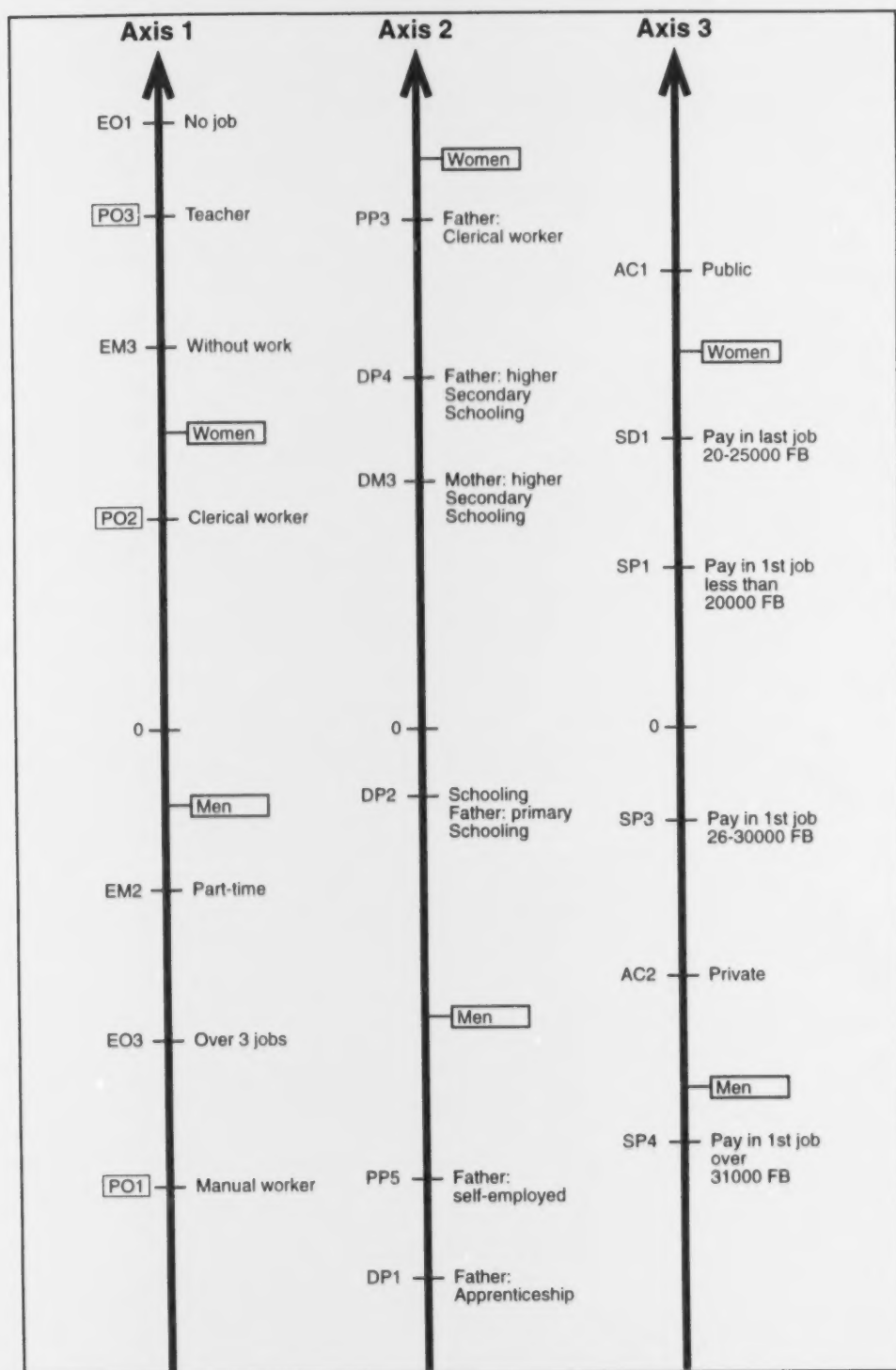
The third factor centres on the sector of activity. In the upper part of the axis, we locate diploma-holders whose jobs fall within the public sector (AC1). At the other end of the scale the school-leavers gravitate more to the private sector (ACZ) (Figure 1).

This separation determines the level of pay earned by the diploma-holders. In the public sector, starting pay is less than BFR 20,000 per month (SP1) or, at best, between BFR 20,000 and 25,000 per month (SD1) for the jobs occupied at the time of the survey.

At the opposite end, where the private sector is concerned, the wages and salaries paid in the first jobs show distinctly higher levels, between BFR 26,000 and 30,000 (SP3), indeed sometimes over BFR 31,000 (SP4), per month.

Apart from differences in pay depending on whether the jobs are in the public or private sector, we also note the classical sex-related division: women have the lowest rates of pay and men the highest.

Figure 1

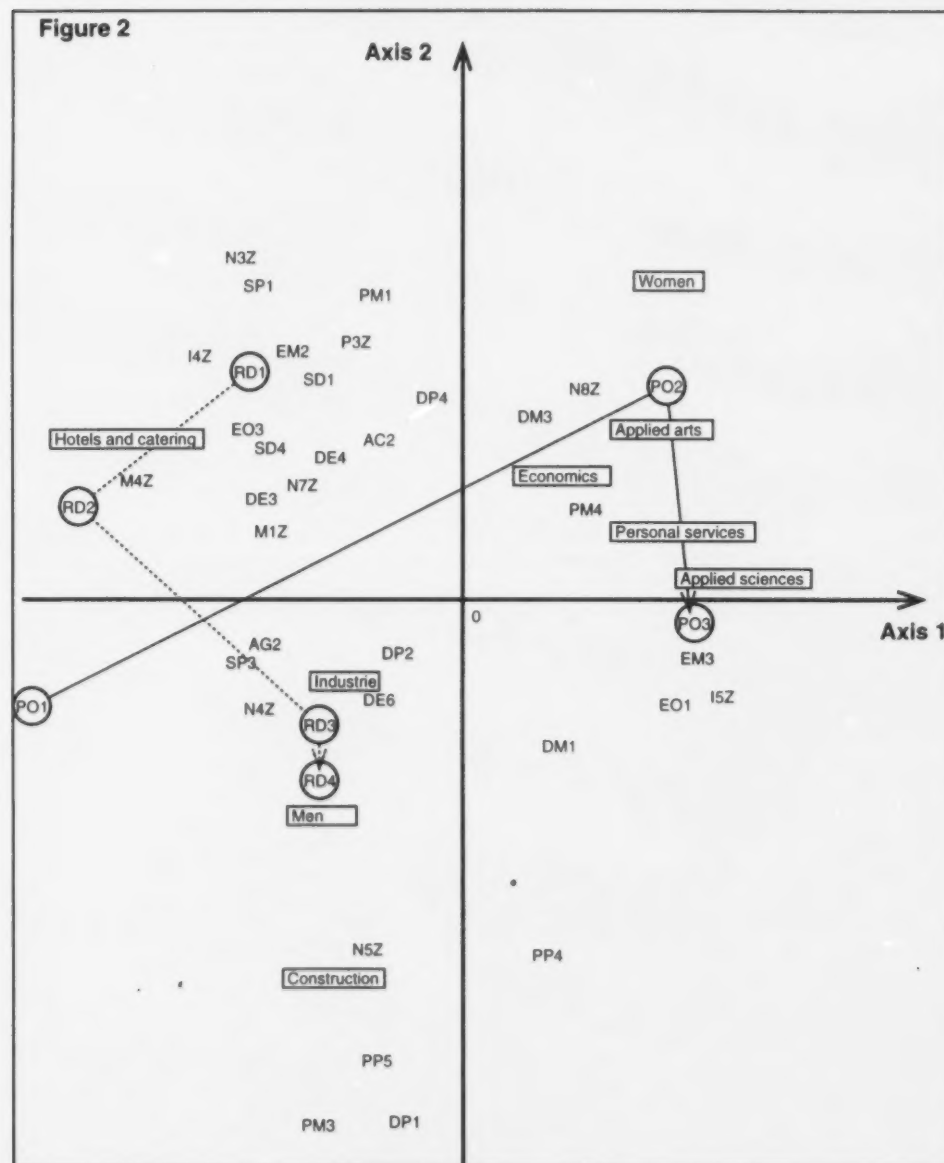


3.2. Examination of graph presentations.

The aim of analysing the projections on the factor charts was, by discerning the proximities and profiles appearing within two clusters of points (individuals and observations), to gain a better appreciation of the relations existing between the observations integrated in the programme. For ease of reading, we will only reproduce here projections of characteristics which are usually sufficient for an understanding of the main relations. Moreover, in order not to overburden the text, we will not seek to cover all possible combinations of the first three factors but will confine ourselves to elucidating the two graph presentations which seem to provide the best illustration. As each of these charts subdivides into four projection areas, and for the sake of clarity, we will number them from I to IV in a clockwise direction from the bottom left quadrant.

Factor chart 1-2, made up of a combination of the first two factorial axes, relates the status of the school-leavers on the market to their social origin.

Quadrant I contains, in particular, school-leavers holding diplomas in hotel and catering studies declaring more than 3 jobs (EO3) over the 42-month period. This high frequency of job changes results from redundancies (RD1) or lack of interest (RD2) in the first jobs. With regard to the means used to secure the jobs, personal relations (M1Z), follow-up to a practical placement or ONEM (Office National de l'Emploi) (M4Z) were stated.



Quadrant II shows a preponderance of women, who seem to be particularly well represented in the economics, personal services, applied sciences and applied arts sectors.

Ex-students with diplomas in applied arts and economics generally have clerical employee status (PO2), and vocational experience is perceived as a major factor in obtaining a job (I4Z). Their fathers also have clerical employee status (PP3) and the school-leaving qualification on the mother's side is of lower secondary grade (DM3).

Some ex-students holding diplomas in applied sciences and personal services work as teachers (PO3), reflecting the vocational background of their mothers (M4). These school-leavers, especially those who had not worked at all during the period analysed, consider family help and family contacts to be important factors in obtaining a job (I5Z).

In view of the fact that the jobs of these ex-students fall within the education sector and that the parents were also teachers, we note a certain degree of social replication.

Quadrant III features diploma-holders who, at the time of the survey, stated that they had no job (EM3) and had not so far been in paid employment during the period analysed (E01). The school-leaving qualification of their mothers was of primary grade (DMI).

Quadrant IV groups male holders of diplomas in construction and industrial studies. These ex-students are aged between 20 and 30 (AG2), have jobs as manual workers (POI) and, at the start of their working lives, earned wages of between BFR 26,000 and 30,000 per month.

Finding a better job (RD3), military service or family circumstances (RD4) were cited as reasons for leaving their first jobs.

Since the main means of finding their present job was their previous employer or an advertisement (DE6), supplementary training does not seem to carry much importance (N4Z).

Among the holders of diplomas in construction, knowledge of languages has hardly any relevance in recruitment processes (N5Z). These are ex-students whose fathers have an occupation of self-employed status (PP5) and whose standard of education is of apprenticeship level (DPI). It is quite probable that the parents are owners of or work for firms linked to the construction industry or allied services, which is fairly strongly indicative of a replication process. Their mothers (PM3) tend to have jobs as clerical workers (PM3).

These first jobs, often held on a part-time basis (EM2), explain the low wages at the start of their careers. Indeed, these persons earned less than BFR 20,000 per month (SPI) in their first jobs and between BFR 20,000 and 25,000 in the last posts occupied at the time of the survey (SDI). As regards holders of diplomas in hotel and catering studies, knowledge of foreign languages is quite definitely a major factor in finding a job. In fact, active fluency in English (P3Z) and Dutch (PIZ) is a distinct advantage for these diploma holders in the tourism sector.

Moreover the jobs held require good vocational experience (I4Z), knowledge of languages and supplementary training (I3Z). On the other hand, the results obtained on the courses taken (N3Z) or the political opinions held by the respondents (N7Z) do not seem to be perceived as major factors in the performance of the first jobs.

For the last jobs, a written offer to a prospective employer (DE3) or a reply to an advertisement (DE4) seem for these ex-students to be the main ways of obtaining jobs in the private sector (AC2), which explains the appreciably higher levels of wages earned: over BFR 41,000 per month (SD4).

Factor chart (1-3), Figure 3, obtained by combining the first and third axes, matches the status and activity sector of the diploma-holders with the male or female sex basis of their jobs or fields of employment.

Quadrant I here features holders of diplomas in hotel and catering studies and construction, the majority of whom work in the public sector (ACI) on a part-time basis (EM2). This is the reason for the relatively low pay earned in these jobs at the start of their careers: less than BFR 20,000 (SPI) and, at best, within a bracket of BFR 20,000 to 25,000 for the jobs occupied at the time of the survey (SPZ).

The relatively modest social origin of these ex-students is highlighted: the father had served an apprenticeship (DPI) and the mother was employed as a manual worker (PM1) or lower-grade clerical employee (PM2).

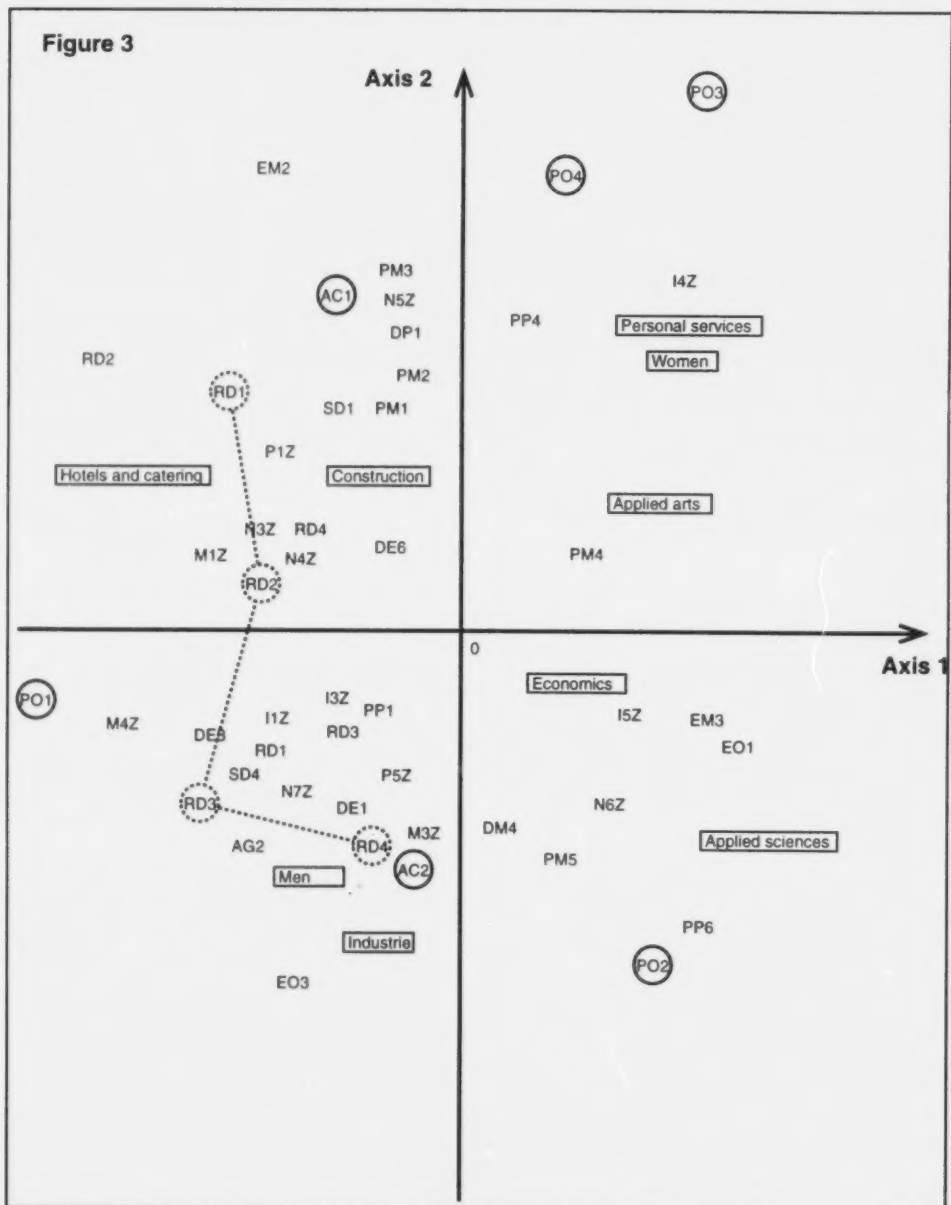
Holders of diplomas in both hotel and catering studies and construction consider the results obtained during their studies (N3Z) and the fact of having completed a supplementary training course (N4Z) to be minor factors in obtaining jobs. On the contrary, personal relations are judged to be the main means of securing employment (M1Z).

This applies to diploma-holders who leave their first jobs through lack of interest (RD2), for family reasons or because of military service (RD4).

Quadrant II groups holders of diplomas in applied arts and personal services, in which women are well represented. It covers an area with a high concentration of teachers among diploma-holders (PO3) and of parents with the same professional background (PP4, PM4).

Also, vocational experience is considered to be the most important factor in obtaining a job (I4Z).

Quadrant III groups holders of diplomas in economics and applied sciences who consider that family contacts or help constitute the main factor in obtaining a job (I5Z). This applies in particular to that fraction of these respondents who did not have a job at the time of the survey (EM3) and who had never been in paid employment during the period analysed (EO1).



The lower part of the quadrant features holders of diplomas in applied sciences working in clerical employment (PO2) whose parents have a professional background in management (PP6 and PM5). In addition, their mothers' diplomas are of non-university higher education standard (DM4), showing proximity to the characteristic indicating the private sector as the field of recruitment for these ex-students (AC2) (quadrant IV).

Quadrant IV, with a high male representation, covers holders of diplomas in industrial studies in particular, with a bias towards the private sector (AC2). This probably explains the higher pay earned by these ex-students at the start of their careers: between BFR 26,000 and BFR 31,000 per month (SP3), sometimes even over BFR 31,000 (SP4), but also in jobs held at the time of the survey (SD4).

It should be noted that a written offer to a prospective employer (M3Z) for the first jobs and personal relations for the last jobs (DEI) are regarded as the main factors in obtaining a position.

For holders of diplomas in industrial studies, the frequency of job changes is high (over 3) during the period (EO3), and political options constitute a negligible factor in holding a job (N7Z). Redundancies (RDI) and finding a better job (RD3) were cited as the main reasons for frequent changes of job.

This quadrant groups those diploma-holders in our sample employed as manual workers (PO1) for whom the main means of obtaining the job they held at the time of the survey were a written offer to a prospective employer (DE3) and personal relations (DEI). In addition, the results obtained in their studies (I3Z) and the specific nature of the diploma (I1Z) were regarded as key factors in obtaining the job currently held.

Table II: Profile of the ex-students according to educational specialization

Criteria	Applied arts	Construction	Economics	Hotels and Catering	Industry	Applied sciences	Personal services
Sex	Women	Men	Women	Men	Men	Women	Women
Activity sector	Private	Public	Private		Private	Private	
Reasons for leaving first job		Finding a better job; Military service	Redundancies; Lack of interest	Redundancies; Lack of interest	Finding a better job; Military service	Redundancies; Lack of interest	
Means used to secure jobs		Previous employer; Advertisement	Advertisement	Personal relations; Follow-up to a placement	Previous employer; Advertisement	Family help	Family help; Advertisement
Status	Teachers, Clerical workers	Manual workers	Clerical workers	Clerical workers	Manual workers	Clerical workers	Teachers
Main factors in getting the job	Vocational experience, Knowledge of languages		Vocational experience	Knowledge of languages, Vocational experience		Knowledge of languages	Vocational experience
Main factors in getting the job	Results obtained	Knowledge of languages; Results obtained	Political support	Results obtained, Political opinions	Geographical situation	Political support	
Parents' occupation	Father: teacher, Mother: teacher	self-employed, Mother: clerical	Father: clerical employee			Father: managerial job	Father: teacher, Mother: teacher
Parents' qualifications	Mother: lower secondary	Father: apprenticeship	Mother: lower secondary	Father: non-university higher education		Mother: managerial job	
Job changes			over 3	over 3		over 3	
Form of employment	Part-time			Part-time			Part-time
Pay at start of first jobs	less than BFR 20,000; BFR 20,000 to 25,000	BFR 26,000 to 30,000	Over BFR 31,000		BFR 26,000 to 31,000	less than BFR 20,000; BFR 20,000 to 25,000	less than BFR 20,000; BFR 20,000 to 25,000

The difference in pay ... according to sex and according to diploma.

The table, which plots the profiles of ex-students according to educational specialization, reveals a characterization meeting several criteria, including pay rates in their first and last jobs.

Generally speaking, the factorial axes show the highest pay rates among men and holders of certain diplomas.

Table III below confirms that the highest pay rates are earned by men and, in particular, that the lowest levels of pay are the province of women.

Table III

Sex	Male	Female	Total
Pay in first job			
Less than BFR 20,000	16	44	60
between BFR 20,000 and 26,000	96	93	189
between BFR 26,000 and 31,000	117	57	174
between BFR 31,000 and 40,000	94	57	151
over BFR 40,000	9	2	11
	332	253	585
Pay in last job			
Less than BFR 20,000	10	40	50
between BFR 20,000 and 26,000	86	97	183
between BFR 26,000 and 31,000	118	61	179
between BFR 31,000 and 40 00	101	61	162
over BFR 40,000	15	6	21
	330	265	595

This table, which has a significance level of $P = 0.01$, shows a clear pattern of discrimination against women. Women are less well paid than men in both the first and the last jobs they occupy. This is fairly noticeable in the lower pay brackets, where 54.8% of women earn less than BFR 26,000, compared with 33.7% of men. In the case of the last job, this trend is intensified, since 54.8% of women earn less than BFR 26,000, compared with only 10.2% of men.

This discrimination on the basis of sex is of course also reflected in pay earned according to diploma.

Table IV

Pay in last job	between BFR 20,000 and 26,000	between BFR 26,000 and 31,000	between BFR 31,000 and 50,000	Total
Diploma				
Applied arts	11	12	11	34
Construction	5	11	11	27
Economics	109	49	31	189
Hotels and catering	18	6	10	34
Industry	62	75	74	211
Applied sciences	5	7	15	27
Personal services	23	19	31	73
	233	179	183	595

Significance $P = 0.01$

Table IV shows high pay rates for holders of diplomas in industrial studies, an essentially male specialization, compared with holders of diplomas in economics, where there is a clear majority of women and pay rates fall into the lower brackets.

4.3. Difficulties in vocational settlement.

A question regarding the way the respondents had spent the time between acquiring their diploma and the time the survey was launched was aimed at assessing the importance of the phenomenon of inactivity and vocational activity since the end of their studies (see time chart attached as an annex).

Occupational inactivity

Five possible reasons for inactivity were put to the persons questioned:

- Y1: the fact of being without work and looking for a job,
- Y2: the pursuit of follow-up studies to the exclusion of any gainful activity,
- Y3: performance of military or civilian service,
- Y4: being without work and not looking for a job for personal reasons (health, family),
- Y5: other reasons not listed here.

Figure IV shows the trend in rates of inactivity by sex over the 42 months following the award of a diploma. The graph reveals a number of similarities, differences and characteristic trends:

For both men and women, rates of inactivity tend to diminish. However, it may be noted that there is a systematic preponderance of women over men among those without work. During the first year following the award of the diploma, the difference in rates is minimal, a feature which recurs after the third year and up to the end of the period considered.

Figure 4

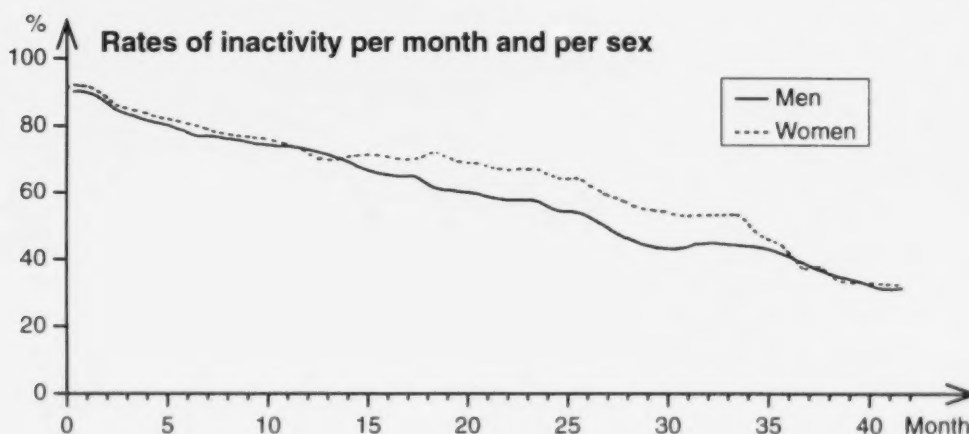
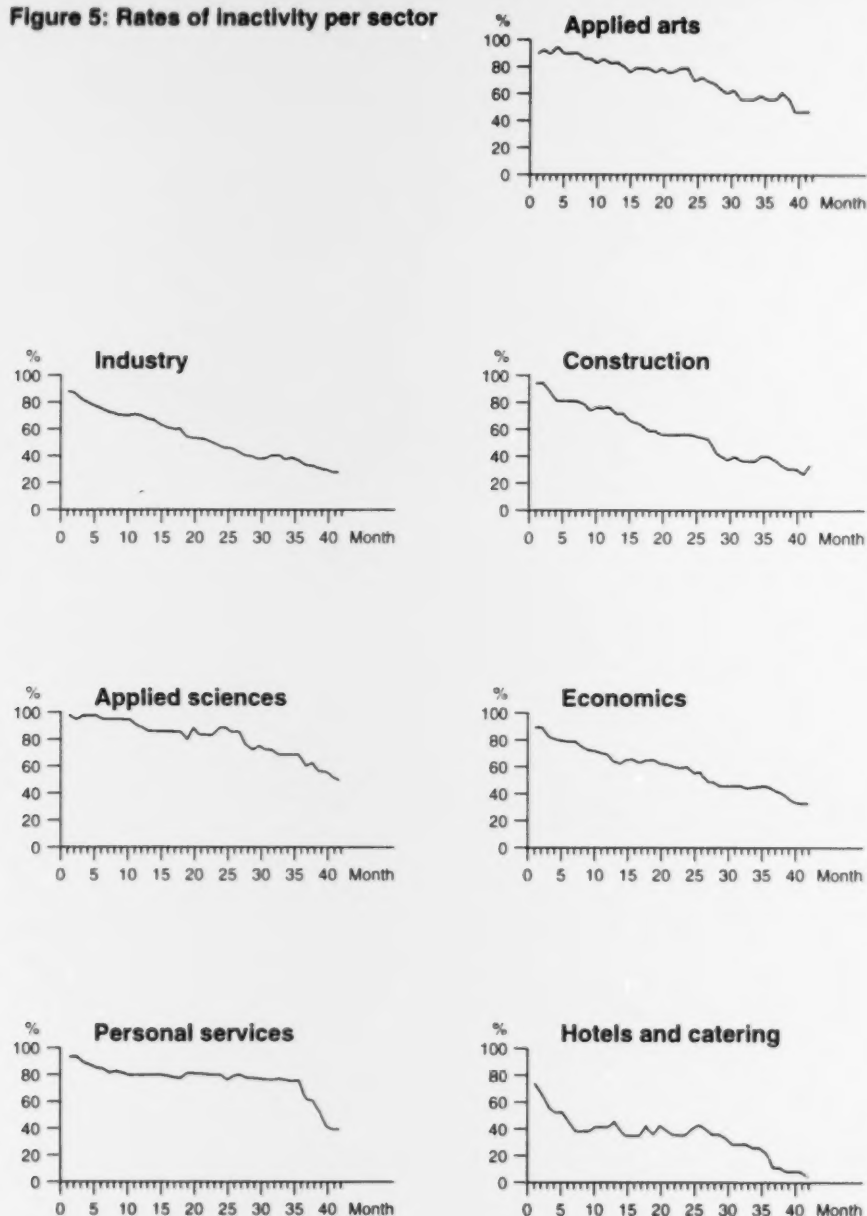


Figure 5: Rates of inactivity per sector



The reasons for vocational inactivity most often cited are unemployment and the pursuit of follow-up studies, to which should be added national service duties for male respondents. All other reasons are of a marginal or fortuitous nature.

The tendency to stay on at school is distinctly greater among girls than among boys, owing to the fact that the diplomas held by a majority of women require extended schooling. Thus, for example, a high proportion of students leaving the economics section will go on to study for an intermediate higher education qualification, since the preferred job will require a full range of language skills, which they will not normally have in practice. This also applies to diplomas in hotel and catering studies.

Conversely, men are less inclined to stay on at school, a fact which has to do with the particular branches of study in which they form a majority. Indeed, for diploma-holders in industrial studies and construction, practical experience and periods of apprenticeship are crucial, and their entry onto the job in the market is more rapid.

A further explanation for this difference in rates of inactivity related to sex is to be sought in the choice of an educational route which is very vulnerable to the economic conditions prevailing during the period considered. The non-commercial sector tends to be the first target for any austerity measures (including education), and this is indeed the sector in which holders of diplomas in applied sciences, applied arts or personal services - among whom women feature prominently - will be seeking employment. It is therefore logical that rates of inactivity should be higher among women than among men.

In fact, industrial activities and construction showed a certain growth during the period of reference, and employment followed this trend, favouring chiefly male manpower since men form a majority in these vocational options.

The rate of unemployment

Figure V shows the rate of unemployment by sex. It reveals a difference to the detriment of women, among whom the trend in unemployment is above that of their male counterparts, except in the summer of 1988. It may be noted that the two rates show an increase during the months of July and August, stabilizing again thereafter.

These seasonal peaks are more pronounced among women, perhaps because they tend to be drawn towards education as a field of employment through the choice of certain areas of specialization (applied arts, personal services). These seasonal movements highlight the often temporary nature of the first job. If we look at the graphs plotting the trend in monthly unemployment rates for each branch of study, we note that there are considerable differences in the shape of the curve for some vocational sectors.

Applied sciences

This sector, after heavy falls in the rates for the twelfth and thirteenth months, shows a brisk recovery between the twentieth and twenty-fifth month.

Hotels and catering

Jobs related to tourism reflect the seasonal effects arising in this sector, showing a trend opposite to that observed, in particular, for school-leavers moving into education. We note a fall in rates in the twelfth, fourteenth and thirty-seventh months, followed by a rise.

Construction, industrial studies

These sectors are characterized by a rapidly falling trend which levels off at a steady rate for the rest of the forty-two month period. This is the case for construction which, between the twenty-eighth and forty-first month, shows rates of 3% and 5% respectively. The same applies to holders of diplomas in industrial studies who, relatively speaking, show the lowest rate.

Graph: rates of unemployment per sector %

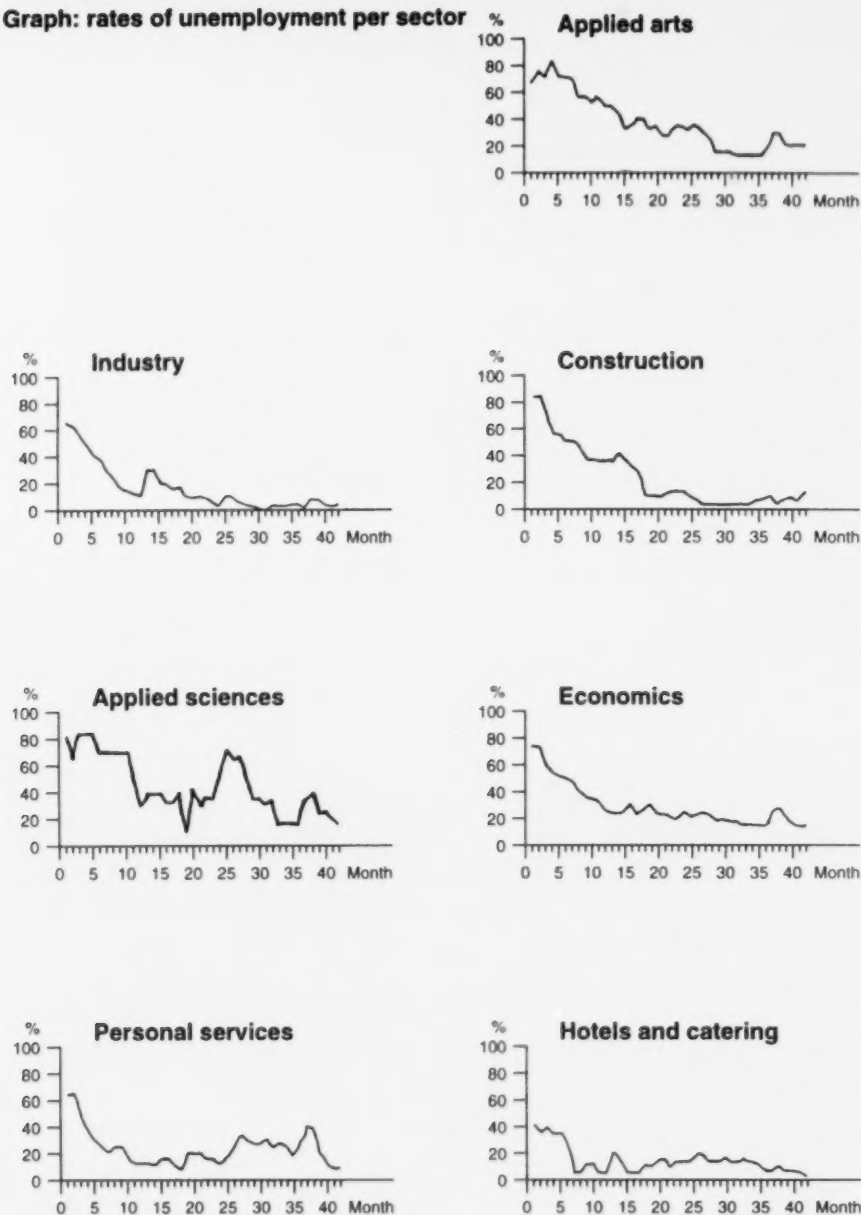


Table V presents monthly rates of unemployment per vocational option at four stages in the period covered.

Table V: Monthly rates of unemployment (as %)

Diploma	4 months	16 months	28 months	41 months	Predominance
Applied arts	85	35	26	20	women
Construction	57	33	3	5	men
Economics	56	31	23	15	women
Hotels and catering	35	5	14	6	men
Industry	50	20	5	3	men
Applied sciences	85	33	50	21	women
Personal services	36	15	30	7	women
Unemployment rate	57.71	24.57	21.57	11	

While, at the end of the 41 month period, 11% of diploma-holders state that they are looking for a job, the rates of unemployment reveal differences at each stage examined.

Four months after the award of the diploma, there is a substantial difference between those qualifying in applied sciences and applied arts (85%), who are at the greatest disadvantage, and those receiving diplomas in hotel and catering studies (35%) and personal services (35%), who are more favourably placed at the start.

At the end of the fortieth month, rates of unemployment remain high for holders of diplomas in applied sciences (21%) and applied arts (20%). It is these branches of specialization which show the highest rates.

Those qualifying in industrial studies (3%), construction (5%) and hotel and catering studies (6%) are least affected by the unemployment phenomenon. While those holding diplomas in hotel and catering studies already had a head start, the construction and industrial studies sectors perhaps benefited from the recovery in the building industry which occurred subsequently (1989-90).

Thus the original field of specialization and sex constitute discriminatory variables with regard to the rate of unemployment, though it is not possible to make any pronouncement on the quality of the jobs secured, particularly in terms of stability or instability, a factor which is illustrated by the finite or indefinite duration of the contract of employment.

Vocational activity

The chart of ways in which time was spent (annex) features five main forms of gainful activity:

- P1: pursuit of an occupation on an indefinite basis,
- P2: self-employment,
- P3: pursuit of an occupation for a limited period,
- P4: holding a job within the context of a programme for special temporary managerial personnel, a programme of work opportunities for the unemployed, an ONEM trainee scheme or a scheme for updating training with pay,
- P5: industrial apprenticeship, ONEM/FOREM vocational training.

While, generally speaking, school-leavers in the various categories of vocational specialization seem to find their way into working life fairly rapidly, their situation is often an insecure one. However, the insecurity takes on different forms according to the different categories considered, hence the need to calculate rates of job insecurity for each field of specialization.

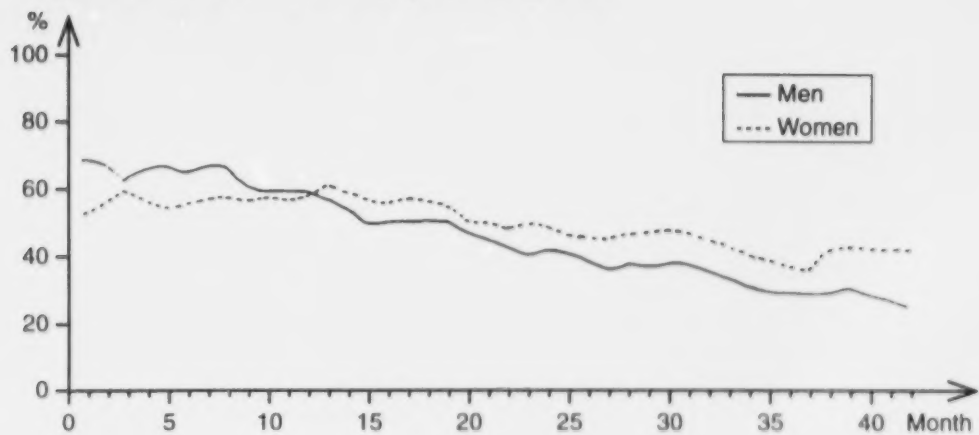
Among the five categories of vocational activity we define, two can be characterized as "stable": P1 and P2. With regard to the self-employed status, we can assume that it is continuous and homogeneous (people are self-employed to the extent that they started out in self-employment). The self-employed status is mutually incompatible with that of a job of indefinite duration (Stroobants M., Desmarez P., 1987)³

Figure VI plots rates of insecure activity according to sex. We note that, generally speaking, the rate of insecure activity diminishes over time, but appreciably more so for men than for women. Indeed, from close on 69% in the first month, the rate for men drops to 26% at the end of the period analysed, whereas for women it declines from 53% to 42%.

For women, the figure remains high and reflects a situation of acute occupational insecurity, this despite the starting year, in which the female rates are lower than those for men.

If we now look at the insecurity rates for each branch of specialization, we note that they are linked to specific diplomas in the same way as the rates of unemployment.

Figure 6: Rates of insecure activity according to sex



Graph: rates of insecure activity per sector

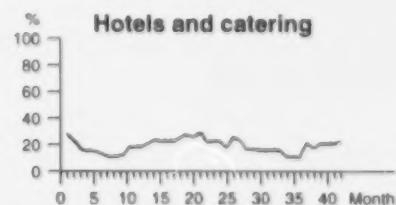
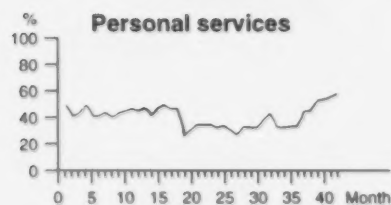
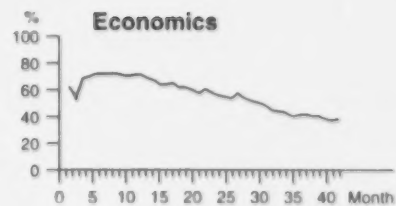
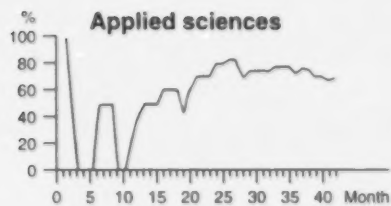
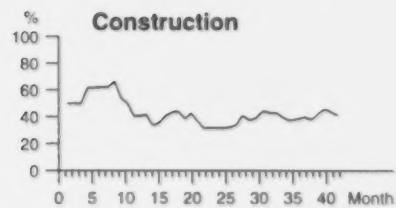
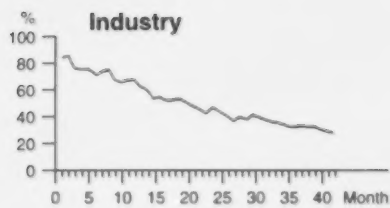
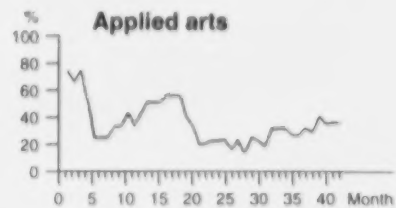


Table VI: Rates of insecure activity per diploma

Diploma	4 months	16 months	28 months	41 months	Predominance
Applied arts	50	55	16	35	women
Construction	62	40	40	42	men
Economics	70	65	53	31	women
Hotels and catering	15	21	16	19	men
Industry	76	54	39	27	men
Applied sciences	0	61	70	68	women
Personal services	50	49	34	53	women
Unemployment rate	46.14	49.28	38.38	40.14	

This table shows that holders of diplomas in **applied sciences** and **personal services** experienced the highest rates of insecure activity at the end of the period (68% and 53% respectively).

Conversely, holders of diplomas in **hotel and catering** and **industrial studies** show lower rates of insecure activity (19% and 27% respectively), below the general average of 40%. The falling trend in the curve for holders of diplomas in **industrial studies** is to be noted. For the hotels and catering section, the rates remain relatively low throughout the period and, at the end of the period, they are the lowest of all the sections,

Table VII: Indicators

Diploma	Rate of unemployment (%)		Rate of precarious activity (%)		Predominance
	at start	at end	at start	at end	
Applied arts	high (85)	high (20)	high (50)	high (35)	women
Construction	average (57)	low (5)	average (62)	low (42)	men
Economics	average (56)	average (15)	average (70)	average (37)	women
Hotels and catering	low (53)	low (6)	low (15)	low (19)	men
Industry	average (50)	low (3)	average (76)	low (27)	men
Applied sciences	high (85)	high (21)	high (0)	high (68)	women
Personal services	low (36)	low (7)	low (50)	low (53)	women
Average rate	57.71%	11.0%	46.14%	40.14%	

It is the **applied sciences** sector which combines the most unfavourable indicators with respect to both rates of unemployment and rates of insecure activity. The same applies to a lesser extent to the **economics** and **applied arts** sectors, which show relatively high rates of unemployment and insecure activity. A further point to note is the high representation of women in the worst placed sectors.

All this only serves to support the proposition that the nature of the diploma and, in addition, sex are unquestionably discriminatory variables where vocational settlement is concerned.

Thus the discrepancies observed depend more on the type of career option for which the various training specializations offer preparation than on some mismatch between training and employment.

General conclusions

Our main object was to analyse the process by which school-leavers find their way into working life with reference to a number of factors, including the type of diploma, sex and social origin without going into details of individual routes taken within the collective experience of the persons concerned.

The analysis of the vocational settlement characteristics of school-leavers holding diplomas of senior secondary technical education reveals a certain number of general trends and directions:

- rates of unemployment are higher among girls and access to a first job is more difficult for subjects of the female sex;
- rates of unemployment vary according to branches of specialization followed, as do rates of job insecurity.

This overall differentiation is supplemented by another function of the diploma held related to the field of employment to which the diploma offers access. Thus, among our respondents, the groups worst affected by unemployment are those in which women constitute a majority, i.e. those who qualified in: applied arts, economics, applied sciences and personal services.

In addition, a substantial proportion of these women earn lower pay than their male counterparts. All this testifies to the explanatory power of the sex variable in itself.

Vocational integration is a function of social origin, this despite the fact that a very high proportion of our respondents come from relatively modest backgrounds. Generally speaking, the parents of ex-students in manual occupations hold a diploma of primary or lower secondary education or served an apprenticeship. The parents of ex-students in occupations classed as clerical employment obtained higher secondary or non-university higher education qualifications. The replication of social backgrounds was particularly noticeable in the teaching profession.

Our results showed that, overall, rates of unemployment declined constantly over the 42 months analysed, hence that the school-leavers quickly embarked on a vocational activity, although male employment is generally deferred because of national service obligations.

However, finding a job relatively quickly should not mask the importance of the transition period, which is tending to become longer. Securing a first job is far from being the end of the vocational integration process, to the extent that certain fields of employment are characterized by a high turnover rate in the period analysed and by a significant level of job insecurity.

On a more technical note, we stress the local scope of our survey (deliberately limited to a single province), which prevents us from drawing conclusions applicable to the country as a whole. Moreover our results relate to a period preceding the current recession, which prompts us to urge continued analyses of the vocational progress of the same ex-students, repeat surveys and, more especially, better co-ordination and the establishment of a pool of resources to carry them out⁴.

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Notes

- 1 We wish to thank Cathérine Mathieu, researcher associated with INAS, for the processing and preparation of the statistical data.
- 2 This method consists essentially in replacing multiple and interrelated variables by a set of new variables called "factors". On this basis, the work of analysis will centre primarily on the interpretation of the factors in question and on the examination of profiles and proximities resulting from the projection of a double cluster of points (individual observations and variables) on to the factor charts formed by combining the main factors extracted in paired sets.
- 3 The rate of insecure activity is defined as follows:

rate of insecure activity: $P3+P4+P5$

$$PI+P2+P3+P4+P5$$

This rate is obtained by dividing the number of respondents pursuing an insecure activity by the total number of persons in an occupation.

- 4 These are the objectives set by the Travail-Formation-Emploi (Work-Training-Employment) support framework, with which INAS is associated.

Annexes

List of variables and characteristics selected.

No	Variable	Characteristic	Code
I	Sex	Man	HOM
		Woman	FEM
II	Age	20-24	AG1
		25-30	AG2
III	Father's job	manual worker	PP1
		clerical employee (lower secondary education)	PP2
		clerical employee (higher secondary education)	PP3
		teacher	PP4
		self-employed	PP5
		other (including managerial)	PP6
IV	Mother's job	manual worker	PM1
		clerical employee (lower secondary education)	PM2
		clerical employee higher secondary education)	PM3
		teacher	PM4
		other including managerial)	PM5
V	Father's educational qualification	apprenticeship	DP1
		primary education	DP2
		lower secondary education	DP3
		higher secondary education	DP4
		non-university higher education	DP5
		other (including university)	DP6
VI	Mother's educational qualification	primary education	DM1
		lower secondary education	DM2
		higher secondary education	DM3
		non-university higher education	DM4
		other (including university)	DM5
VII	Form of employment	full-time	EM1
		part-time	EM2
		no work	EM3
VIII	Occupational status	manual worker	PO1
		clerical employee	PO2
		teacher	PO3
		other (military service, self-employed artist)	PO4
IX	Sector of activity	public	AC1
		private	AC2
X	Main factor in getting present job	Specific nature of the diploma	I1Z
		school attended	I2Z
		result obtained, supplementary training	I3Z
		vocational experience	I4Z
		family contacts or help	I5Z
		other (geographic situation, political options)	I6Z
XI	Main factor in getting present job	Specific nature of the diploma	N1Z
		school attended	N2Z
		results obtained	N3Z
		supplementary training,	
		completion of military service	N4Z
		knowledge of languages	N5Z
		geographic situation	N6Z
		political options	N7Z
		other (family help, vocational experience)	N8Z

XII	Knowledge of languages	speak Dutch	P1Z
		no	P2Z
		speak English	P3Z
		no	P4Z
		speak more than 3 languages	P5Z
		no	P6Z
XIII	Number of jobs	no job	EO1
		1-3 jobs	EO2
		more than 3 jobs	EO3
XIV	Follow-up training	yes	FC1
		no	FC2
XV	Main means of obtaining first job	personal relations	M1Z
		family contacts	M2Z
		written offer to an employer	M3Z
		other (previous employer, follow-up to a placement)	M4Z
XVI	Main means of obtaining last job	personal relations	DE1
		family relations	DE2
		written offer to an employer	DE3
		reply to an advert	DE4
		placement by ONEM	DE5
		other (previous employer, sent an advert)	DE6
XVII	Starting pay (first job)	— BFR 20,000	SP1
		BFR 20,000-25,000	SP2
		BFR 26,000-31,000	SP3
		over BFR 31,000	SP4
XVIII	Starting pay (last job)	BFR 20,000-25,000	SD1
		BFR 26,000-30,000	SD2
		BFR 31,000-40,000	SD3
		over BFR 40,000	SD4
XIX	Reasons for leaving first job	redundancy	RD1
		lack of interest	RD2
		found a better job	RD3
		other (military service, family reasons)	RD4

11. How did you spend the time during the period indicated below? (For each month, put a cross into the box for the activity in question)
Oh no ... The weather looks rather nice today ...

Activity

Job of indefinite duration
Job of finite duration (including temporary job)
Other contract of employment (CST, TCT, CMT, ACS, temporary ONEM placement,...)
Self-employed
Without work and looking for a job
Industrial apprenticeship
Vocational training
ONEM/FOREM
Without work and not looking for a job for personal reasons (health, family)
Continuation of studies
National service (military or civilian), conscientious objector
Other, please state

11. Quel a été votre emploi et temps pendant la période mentionnée ci-dessous ?

(Pour chaque mois, mettez une croix dans la case correspondant à l'activité exercée)

Oh non
Je trouve que
le temps est
plutôt beau
aujourd'hui...



Activités	1987					1988					1989					1990														
	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Emploi à durée indéterminée																														
Emploi à durée déterminée (y compris travail temporaire et intérimaire)																														
Autre contrat de travail (EST, TET, EPT, ACS, stagiaire ONEM, ...)																														
Indépendant																														
Sans travail et à la recherche d'un emploi																														
Apprentissage industriel																														
Formation professionnelle ONEM / FOREM																														
Sans travail et n'ayant pas pour raisons personnelles (santé, famille)																														
Suite des études																														
Service militaire ou civil, objection de conscience																														
Autre(s) Précisez																														

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The transition from school to work:

Options and choices after compulsory education

Introduction

After attaining the age at which one is no longer subject to compulsory education, individuals have a choice in how much they invest in acquiring skills. If one is no longer subject to compulsory education the share of the time devoted to the investment in human capital can range from zero (full-time work) to one (full-time education). In between these boundaries are various possibilities of combinations of work and training, where part of the week is spent on productive activities and part of the week is spent on acquiring new skills. Examples of these combinations of work and training are apprenticeship systems and on-the-job training.

The specific choices open to individuals are determined by the options offered by the educational system. In most education systems compulsory education is fully comprised of general education¹. Only after individuals attain the age at which they are no longer subject to compulsory education is vocational training offered. Vocational training is usually offered both in (full-time) formal education, and by firm-related training schemes. Educational systems differ in their emphasis on formal education and on firm-related training in transferring vocational skills. Some systems (for example the German system) offer wide possibilities for acquiring vocational skills by going into apprenticeships, while other systems (for example the Dutch education system) emphasize vocational training within institutions of formal education.

In this paper we present a discussion of the optimum outline of the educational system along two lines. The first concerns the extent of government involvement in education. We will ask ourselves which options should be provided for by the government, how far government subsidisation of education should go, and to what extent investments in education should be left to private initiatives and financing. The second question relates to the extent to which the transfer of new skills should take place by formal education and to what extent this should be done by on-the-job and firm-related training.

After the outline of the optimum education system, we present a descriptive analysis of choices made by individuals within a specific educational system - the Dutch education system - and the differences in the perceived labour market perspectives between formal schooling- oriented education and firm-related education and training. We use a recent data set of Dutch school-leavers to analyse the choices made between the various options offered by the Dutch education system after attaining the age of compulsory education, and the differences in their perceived labour market perspectives by type of education.

Throughout this paper we distinguish the following forms of human capital acquisition:

1. Formal education in general academic skills. This education mainly takes place in institutions (schools) for primary and secondary education;
2. Vocational training. These vocational skills are either transferred through institutions of formal vocational education or through a combination of formal vocational education in schools and learning on-the-job (apprenticeship and "dual" system);

3. On-the-job training and enterprise or firm-related training. This includes all training of workers organized by the firms themselves.

The outline of this paper is as follows. In the two subsequent sections we deal with the options offered by the educational system and the choices made by individuals between these options, respectively. In section 2 of this paper we present a discussion on the outline of the optimum educational system². This section is of a theoretical nature, while section 3 is of an empirical nature. In section 3 we will model the choice between work and education within a specific educational system, the Dutch education system, and the differences in the perceived labour market perspectives between the educational options. School-leavers in the Dutch education system are faced with the choice between three options: to continue (full-time) formal education, to go into an apprenticeship system or an in-service training programme, or to work. Individuals who decide to work can either accept a job which offers enterprise-related training or a job which does not offer enterprise-related training. We will ascertain what determines the choice for one of these options. We will further analyze the differences between the relevant options in the perceived labour market perspectives individuals who continue in education attach to their type of education chosen. Two dimensions of labour market perspectives will be distinguished: the perceived probability of finding a job and the expected earnings in this job.

The data we use in the empirical analysis is taken from a sample of school-leavers from secondary education in the Netherlands (RUBS, Registration on Outflow and Destination of School-leavers). This data contains information on post-graduation labour market status (work, apprenticeship, in-service training, full-time formal education), participation in enterprise-related training, current earnings, previous education, and personal characteristics.

1. An optimum education system

1.1. Motives for government involvement in education

The theoretical framework we use in this section is the theory of human capital. A key notion in this theory is that individuals invest in themselves in order to improve their earnings potential. According to the human capital theory, the choice whether or not to invest in education is determined by the costs and benefits of the alternatives. The costs of the investment consist of direct training costs (tuition, books) and opportunity costs or forgone earnings. The size of the costs and benefits are determined by the capabilities of the individual, the requirements of the job, and the match between capabilities and job requirements.

One of the most useful insights offered by the human capital theory is the distinction between general and specific human capital. General human capital are skills which can be made productive in all jobs; specific human capital relates to training which can only be made productive at one specific firm (or job or industry). General and specific human capital are relative terms. Most training is neither completely general nor fully specific. However, some types of training are more specific than others. Primary and secondary education are generally considered to be oriented towards transferring general human capital. If we order types of education by their degree of (firm) specificity, vocational training can be considered to be more specific than secondary education. Firm-related vocational training - such as apprenticeships and on-the-job training - can be considered to be more firm specific than vocational training in formal education.

The human capital theory predicts that the benefits of investments in general training will completely accrue to the worker. The worker will also pay the cost of investments in general human capital. The costs and revenues of specific training will be shared between the worker and the firm. If the firm retains part of the gains to the worker of the investment in general human capital, the worker will leave for another job in which his/her skills are more fully rewarded. If the firm on the other hand pays for the investment in general human capital it faces the risk that the worker will leave the firm after completing the training. In that case the firm loses its investment. For similar reasons, the firm will not be willing to pay all the costs of firm-specific training as well. Because of the possibility of lay-off, the worker will also not be willing to pay all the cost of human capital investments, which can only be made productive at the current firm. By sharing both the costs and the revenues of investments in specific human capital, the tie between worker and firm will be strengthened and the probability of job mobility will be reduced.

Two types of government involvement in education can be distinguished: subsidies and the provision of quality standards. Examples of the provision of quality are the provision of government-controlled tests and certificates.

Government involvement in education is large. On average in the OECD countries, about 4.8% of GDP is spent on public expenditures on education, while about 12% of all public expenditures are for education³. In general there are two motives for government intervention in education. The first concerns *efficiency* considerations; the second motive is *equity* considerations.

Efficiency

In brief, the efficiency argument for the subsidisation of education is based on the notion that, in the absence of government intervention, investments in education will be less than the (social) optimum investment. Government subsidies lower the costs of investments in human capital for the individual, and by lowering the costs, the amount of the investment in human capital will increase.

At least three reasons can be given for under-investment in education in the absence of government subsidies:

1. The social returns to education may be higher than the private returns. The social returns in excess of the private returns include: better health care and lower (public) health care costs for more highly educated workers, more responsible citizenship and more active participation in the democratic process by more highly educated workers, etc.⁴ As individual investment decisions are based on considerations about private returns only, this will lead to investments in education which are less than socially desirable. A similar argument can be made if there are social costs involved to a low level of investments in education (one example of these are the social costs of high rates of unemployment among less educated workers).
2. The costs of the investment are made in the present. The revenues accrue in the future and are not known with perfect certainty. If individuals are averse to risks, their investment in education will be less than optimum.
3. Liquidity constraints on the part of the individual. Banks and credit markets may not be willing to finance investments in (embodied) human capital. This is a form of market failure on the part of credit markets. In the presence of liquidity constraints, investments in education will be less than desirable.

Equity

In the absence of government intervention, education increases inequality between individuals. Individuals with higher initial endowments (both financial endowments and innate human capital endowments or capabilities) have lower costs of acquiring new skills and will therefore invest more in education than less advantaged individuals. This will increase the endowment differential between more and less advantaged individuals (i.e. between students from high and low income families, and between intelligent and less intelligent children). The human capital endowment differential will be reflected in increased earnings differentials. By subsidizing the least advantaged students more than the most advantaged (for example by providing remedial teachers or by grants for students from low income families) the government aims to equalize opportunities between individuals.

The equity and efficiency arguments for government involvement apply to investments in general human capital for which the individual has to pay the full costs in the absence of government subsidies. The question can be raised if these arguments also apply to vocational education and to enterprise-related training. If these arguments also apply to investments in specific human capital, there is a case for state provision of *vocational training* and *enterprise-related training*, or for subsidies for firms providing vocational or enterprise-related training, as well⁵. In the remainder of this section we will discuss the efficiency and equity considerations of state involvement in vocational and enterprise-related training. We will relate this to the discussion about educational reforms, and to international differences in education systems. We will also take into consideration the results of empirical research on rates of return to vocational education, on-the-job training and enterprise-related training.

1.2. The provision of vocational training

The empirical evidence on possible under-investment in vocational training is not very conclusive. Industrialists and policy makers in Europe sometimes worry that too few people receive technical and vocational qualifications, and that this will impair economic growth. A possible explanation for the low attractiveness of technical education is that the wage differential between technical and non-technical education is too small to induce individuals to choose a technical education. The evidence on the wage differentials between technical and non-technical education is mixed. In some countries, those with technical qualifications earn more than those with non-technical qualifications. In other countries it is the other way around.

Campbell, Basinger, Dauner and Parks (1986) and Campbell, Elliot, Laughlin and Seusy (1987) find that in the United States young workers with vocational qualifications earn 5 to 9% more than workers with general qualifications. Kang and Bishop (1986, 1989) find that vocational courses yield a wage effect of 7 to 8% compared to general education. Freeman (1975) finds that the private returns to occupational training in proprietary schools and technical institutes for workers aged between 45 and 59 are between 8.7% and 10.8%. Trost and Lee (1984) analyze the choice between work, a technical education and a college education after high school. They find that, given the personal characteristics of the worker, a technical education yields a higher wage than a college education. They further find that, after correcting for self-selection, the rate of return to vocational education is 9%. Hill (1989) finds in a survey among employers that workers with a post-secondary technical education are more productive than workers with high school qualifications. Similar results are found by Bishop (1982, 1985). Bishop (1989) surveys the research on the returns to high school vocational education. He finds that if a job is found which matches the vocational qualifications of the workers, earnings are 7 to 8% higher, productivity is higher, and the probability of becoming unemployed is lower.

For the Netherlands, evidence on the wage differential between workers with technical qualifications and those with non-technical qualifications is mixed. From the school-leavers data (RUBS), it emerges that, among school-leavers with intermediate vocational qualifications (MBO), those with technical education earn more on average than those with agricultural, economic-administrative or (health) care education. It also appears that the average net monthly wages of school-leavers with intermediate technical qualifications are higher than those with intermediate general education (HAVO and VWO). However, as most school-leavers from intermediate general school education continue in formal education, a relatively large fraction of school-leavers with intermediate general qualifications probably only has a small part-time job. The difference in net monthly wages between intermediate vocational and intermediate technical education may (at least partly) reflect a difference in hours of work.

In Groot (1993) it is found that workers who are approximately 43 years of age in 1983 and have technical qualifications earn 6% less than workers with general qualifications. It appears that, initially, workers with technical qualifications earn more than those with non-technical qualifications, but that at the mid-career point the wage differential is reversed. One explanation for this reversal might be found in differences in investments in human capital after finishing schooling. Maybe workers with general education invest more in vocational skills by on-the-job and enterprise-related training than workers with technical qualifications.

In Germany, half of the young workers receive vocational qualifications through the so-called "dual system" (Giesecke 1989, p.3). The study by Giesecke (1989) is one of the few studies on the individual returns of the dual system. He finds that for both males and for females the gross wage effects of administrative vocational training ("kaufmännische Lehre") are approximately 10%. Industrial training ("gewerbliche Lehre") yields positive returns for men but not for women. Hofbauer and Nagel (1987) show that a year after completing the training, more than 40% of the trainees have left the firm or the profession. They also find that 15 to 20% of the workers who have finished their training have a job below their level of qualification (in their first year).

As has been argued above, because vocational training is (at least partly) firm or industry-specific there is an argument in favour of firms or industries sharing in the cost of this training. Firms are probably less averse to risks and have greater access to capital markets than individuals. Further, the differential between private returns and social returns for specific training is probably less than for general training. For these reasons, it could be argued that the government involvement in vocational training can be less than government involvement in general education, and that firms or industries share in the costs of vocational education.

This raises the question how far firms' or industries' involvement in the provision of vocational education should be extended. This question is by no means trivial. In the Netherlands there are plans for a reform of the intermediate vocational education system from a formal education oriented system to a system which resembles the German "dual system"⁶. Similar plans for modelling vocational training on the German dual system exist in other countries as well. A change towards a dual system implies a reduction of government intervention with vocational education⁷. What will be the equity and efficiency effects of such reform?

The learning environment differs between schools and firms. For students the variation in the learning environment is probably larger within an apprenticeship system than within a regular school, as firms differ more in the training environment they provide than schools do and trainees are dispersed over a large number of training places within an apprenticeship system. This implies that the variance of the efficiency of human capital production (or learning efficiency, see below) within an apprenticeship system is larger than within schools. A second difference between a regular schooling system and a firm-related schooling system is the selection for the training programme. Firms apply different selection criteria for admitting individuals to the training programme than do schools. Firms have an interest in selecting the most readily trainable and the (potentially) most productive individuals for the training programme. A third difference between firms and schools is that firms have more opportunities to attract better students for the training programme. Firms have more opportunities for offering financial compensation or wages to trainees, and for offering career opportunities after graduation than do schools.

The result of these differences is a creaming of students by firms and selective matching of trainees and firms. The most able students will be attracted by the firms that offer the best training environment and the best career opportunities after completion of the training programme. This may lead to a segmentation process in which individuals with the lowest capabilities are allocated to firms and jobs with the lowest prospects, and high capability individuals to job and training places with good career prospects. This will increase inequality between individuals. So, from an equity point of view, firm-related training programmes - such as apprenticeships systems and a "dual system" - are not preferential to a formal education system.

The efficiency aspect of education can be distinguished into two components: learning efficiency and information efficiency. Learning efficiency refers to efficiency by which new productive skills are transferred. It is the efficiency by which new skills are taught in class or at the workplace. Information efficiency refers to the efficiency by which information about productive skills of the individual are transferred to potential employers.

From a learning efficiency point of view, learning by doing, on-the-job skill acquisition and firm-related training is probably a more efficient way of acquiring new skills than formal classroom-oriented teaching. Further, firm-related skill transfer is probably more up-to-date with the latest technological developments, and adjustment to (technological) change is quicker. Also the skills taught are more adjusted to the skills needed on the job. This also suggests that the learning efficiency of firm-related training is higher than the transfer of skills through formal education.

Firm-related training is a more efficient way for the firm to learn about the productive skills of the trainee than formal education. However, this may only apply to the firm offering the training place. As information about productive skills is, at least partly, private information for the firm and worker involved, and the costs for other firms to learn about this job-related productivity are probably high, the overall information efficiency of firm-related training is probably lower than formal education with standardized tests and certificates. Of course, the difference in information efficiency between formal education and firm-related training decreases if apprenticeship systems also issue standardized tests and certificates.

Firms will base their number of training places on the need for new recruits in the short run. In a recession, the demand for labour will be lower than during boom periods. This implies that the number of training places offered by firms varies pro-cyclically over the business cycle. A low supply of training places in a recession may cause an excess demand for skilled workers if the economy recovers. This short-sightedness of employers may, therefore, result in a number of training places in a downward phase of the business cycle which is less than optimum. Fluctuations of training places over the business cycle therefore create inefficiencies. As schools and the supply of trainees are less responsive to business cycle fluctuations, this inefficiency problem will be less severe in a formal education system.

1.3 The provision of enterprise-related training

In some countries there are central regulations on CVT (continuing vocational training), while in other countries CVT is left to market forces. One important aspect of centralization of CVT are regulations concerning a mandatory amount of money for CVT. The most far-reaching of these central agreements is the one in France where a mandatory 1.5% of the wage bill has to be spent on CVT. In other countries the amount is lower: 0.7% in Spain, 0.25% in Belgium, and 0.20% in Greece.

At the other extreme, there are countries where the government completely refrains from imposing such regulations. In Germany, CVT is regarded as a market good which should remain as free as possible from government regulation. In Italy, government intervention in CVT is also of a limited nature. In these countries CVT is the responsibility of the enterprise or industry.

In the Netherlands, the government takes the point of view that continuing vocational education is primarily the responsibility of employers and employees⁹. This point of view has been agreed to by employers and employees in the General Agreement of 1989. In the government's white paper "Schooling for workers" (Scholing voor werkenden) it is stated that "all in all, the cabinet takes the opinion that there are reasons for the government playing a general role in continuing vocational education, but this role can only be and must be modest. This is all the more so, if employers and employees and their organizations take their primary responsibility". According to the government, schooling policies have to take place at the enterprise level. Besides this, the government places value on the fact that at industry level or otherwise, for example in collective bargaining, adequate arrangements will be made. The concern of the government is limited to the following five activities: information, identifying, stimulating, formulation of rights and obligations.

Empirical research shows that investment in on-the-job training generates high rates of return. Recent research has indicated that effects are based on true productivity increases, rather than just wage increases following the screening and sorting of individuals. In Groot (1993) - using data on individual productivity ratings and wages of employees in the Netherlands - it is found that the duration of training has a positive effect on productivity growth, wage growth, productivity differences and wage differences. The average productivity growth of training is 16%, while the average productivity difference is 8%. The average duration of training is approximately 140 days. The average wage growth is less than a quarter of the average productivity growth. A 10% increase in the duration of training increases productivity growth by about 1.2%. The corresponding figure for the productivity difference is 1.1% to 2.0%. A 10% increase in the duration of training increases wage growth by approximately 8.0%. Each week of training raises the productivity growth by approximately one percentage point, and raises the productivity difference by approximately 0.1 percentage points. A week of training raises wages by 1.2%. A 10% increase in the productivity growth increases wage growth by between 1.9% and 3.5%. A one percentage point increase in the productivity growth raises wages by 4.1 to 7.3%.

The high rates of return suggest that there may be under-investment in on-the-job training. And it is not quite clear why these rates remain so high, and are not driven down by increased participation. Under-investment indicates market failure and inefficiency. This - as has been argued - provides a case for government involvement in enterprise-related firms.

We see three arguments why the provision of on-the-job training is less than efficient⁹. First, there is a substantial premium on the risk involved in rather specific vocational training. Second, there is a relation to the market power of firms: monopsonistic power in the output market is shared with workers, who have to be trained to be valuable participants in the firm. Third, training is not fully specific, workers face liquidity constraints so firms are forced to pay the cost of training, and firms fear that their trained workers will leave for better paying firms in the industry. This leads to an under-provision of training¹⁰.

The risk-premium might be reduced, and the participation increased, if the government would step in, with schools and subsidies. The rent-sharing could only be attacked with general competitive policies. With partly specific training and liquidity constraints, collective action by the industry may solve the problem of under-provision of training. In some industries in the Netherlands, such forms of collective action have taken place in recent years under the name of "Education and Development Funds" (Opleiding- en Ontwikkelingsfondsen or O&O-funds)¹¹. These O&O funds are jointly run by (representatives of) employers and employees. The aims of the O&O funds are:

- enhancing the participation in schooling and courses, and the furthering of the quality of these courses;
- enhancing the participation of youngsters in jobs in the metal and electronics industry;
- equalizing the costs of training in the industry;
- enhancing CVT.

The O&O funds subsidize:

1. training and education
2. drawing up of an enterprise-based schooling plan.

In the O&O fund for the Metal and Electronics Industry, firms that apply can have 50% of their schooling costs subsidized from the O&O fund up to a maximum of 500 guilders per employee per course (figures for 1992). For special groups - such as female employees, employees over forty and employees without a lower vocational education degree - the subsidy is 650 guilders.

A firm can have its schooling costs re-imbursed on the basis of a schooling plan. This schooling plan should be submitted to the O&O funds within two months of approval by the works council. The following requirements have to be fulfilled:

- the schooling activities have to be related to the human resource and organization policies of the firm;
- the plan should refer to special target groups, such as female employees, employees over forty, and employees without a lower vocational education degree;
- it should be specified how individual employees can let their interests in a course be known.

In the metal and electronics industry, the fund is financed by levying 0.9% (in 1992) on the gross wage bill of the firms in the industry. The percentage is part of the collective wage agreement of the industry. Of this percentage, 0.5% will initially be collected. Of this percentage, 0.6% is designated for "skill courses" (vakopleidingen), 0.1% for advanced vocational education, and 0.2% for courses in CVT. If 0.5% of the wage bill is collected, the fund has 50 million guilders for subsidizing educational activities.

In 1989/90 140 of the total 1,500 firms in the metal and electronics industry applied for subsidies for a total of 9,000 individual courses. In 1990/91, 135 firms applied for subsidies for an ad hoc, individual course. Further, in 1990/91, 210 firms submitted a schooling plan. These 210 firms represented about 105,000 employees, out of a total 250,000 employees in the industry.

1.4 Policy considerations

In this section we have looked at the optimum provision of vocational education and enterprise-related training. We used two criteria for determining the optimum provision of education: equity and efficiency. The main policy conclusions that can be drawn from this analysis are:

1. From an efficiency point of view, there is a rationale for the involvement of firms or industries in the provision of vocational education.
2. Both from an efficiency and from an equity point of view, it can be argued that the provision of vocational education should not be left entirely to firms or industries, and that government involvement should be on a large scale.
3. There are clearly advantages in organizing vocational education within schools of formal education, with some of the training taking place within firms.
4. As there are indications of under-investment in enterprise-related training, there is a rationale for government involvement in enterprise-related training as well. This should not necessarily have to be by providing subsidies. Co-ordination and organization of collective action within industries by the government to increase investments in enterprise-related training may solve the under-investment problem as well.

2. An empirical analysis of choices after compulsory education

RUBS (registration of output and (labour market) destination of school-leavers) is an annual survey among leavers from secondary level vocational and general education (LBO, MAVO, HAVO, VWO). RUBS was started in 1988 when school leavers from 1986/1987 were interviewed. Both those aged 16 and over who have received their certificate or diploma and those who have not qualified participate in the survey. The sample sizes differ over the years (approximately 60,000). RUBS is a postal survey. After a few weeks the non-response group receives a reminder. The overall response rate is approximately 60%. The response rate is strongly correlated to educational attainment, gender, migration, region, etc. However, despite these biases the data is fairly representative of the total population of school-leavers.

In general the following questions are asked in RUBS:

1. General questions (gender, date of birth, etc.);
2. Education followed (pathway) and qualifications attained;
3. Main activities at the moment of survey (work, full-time education, apprenticeship, unemployment);
4. For those in full-time education: type and level of education;
5. For those who work or are in apprenticeship training: working hours, type of job, branch, wages, level of education required, etc.;
6. Participation in courses of further education or in-company training;
7. Opinions about the education followed in relation with the main activity at the moment of survey.

2.1 The choice between work and education

In table 1 we give an overview of the destination of school-leavers in the RUBS surveys 1991 and 1993. The main conclusion we can draw from this table is that over the years more and more graduates continue in full-time education. At the same time less and less students enter the labour market with a lower or intermediate educational level. This holds both for students with general and for those with vocational qualifications. This process has been going on since the start of the RUBS in 1988. The participation in apprenticeship training, especially for school-leavers from vocational education, is more or less stable.

Table 1
Destination of graduated school-leavers in 1991 and 1993 (number of observations and percentages)

year	work		apprentice-ship		full-time education ment		unemploy-		other	
	'91	'93	'91	'93	'91	'93	'91	'93	'91	'93
LBO	721 14.6	311 7.3	1,265 25.6	989 23.2	2,675 54.1	2,795 65.7	90 1.6	60 1.4	203 4.1	99 2.3
MBO	7,237 50.2	5,198 43.0	882 6.2	839 6.9	4,506 31.3	4,486 37.1	242 1.7	347 2.9	1,534 10.6	1,221 10.1
MAVO	172 7.1	81 3.1	178 7.3	128 5.0	1,996 82.3	2,337 90.6	16 0.7	15 0.6	64 2.6	19 0.7
HAVO	151 9.9	70 3.8	78 5.1	70 3.8	1,223 80.1	1,678 90.6	6 0.4	9 0.5	69 4.5	26 1.4
VWO	76 6.3	52 3.6	16 1.3	11 0.8	1,065 87.6	1,361 94.1	5 0.4	2 0.1	54 4.4	20 1.4

Of those who enter the labour market after graduating, some enter into jobs which offer enterprise-related training. In table 2 we present the incidence of participation in enterprise-related training by type and level of education for 1991 and 1993. The incidence of enterprise-related training increases with the level of education: it is higher for MBO graduates than for LBO graduates, and higher for VWO graduates than for HAVO or MAVO graduates. Apparently more highly educated workers are more easily trainable than less-educated workers. The incidence of enterprise-related training is higher for workers with general qualifications (MAVO, HAVO, VWO) than for workers with vocational qualifications (LBO and

MBO). Somewhat remarkable, between 1991 and 1993 the incidence of enterprise-related training has decreased at all education levels.

Table 2
Percentage of employed graduates who participate in enterprise-related training.

	employed and participating in enterprise-related training 1991	employed and participating in enterprise-related training 1993
LBO	25.8	18.9
MBO	37.9	30.9
MAVO	30.5	25.0
HAVO	50.8	33.3
VWO	59.2	35.3

2.2 Why do students continue in education?

A sub-sample of the respondents who graduated in general secondary education (MAVO, HAVO and VWO) and who have continued in education have been questioned about their motives and expectations for continuing in education. These include graduates in general secondary education who have continued in full-time education, apprenticeship or in-service training programmes. Some 1,240 individuals responded to these questions.

They have been asked about their most important reason for enrolling in the type of education of their choice. The distribution of the response to this question by type of training is given in table 3.

Table 3
Distribution of the most important reason for enrolling in the educational institution of their choice (in percentage).

Reason for choosing this education?	most impor- tant reason	second most important reasons
out of interest for the subject	72.8	0.2
the toughness of the study	1.0	4.1
the duration of the study	1.8	4.4
the chance of obtaining a certificate	3.0	6.4
the chances of work after completing the education	6.4	22.7
the expected earnings after finishing the education	0.5	3.5
the commuting distance between home and school	0.6	1.7
others in my environment also enrolled in this education	0.2	0.4
the quality of the education	1.3	5.6
I need this training for the education	6.3	4.5
I plan to enrol in afterwards other reason	6.1	3.2
only one reason listed		43.2
total	100.0	100.0

The most important motive mentioned for choosing their present education is interest students in the subject. Almost 73% of the students mention this as the most important reason. Less than 6% mention *study efforts*, such as the toughness of the study, the duration of the study or the chance of obtaining a certificate as the most important reason. *Labour market perspectives* - such as the chances of work and the expected earnings after graduation - are mentioned by less than 7% of the respondents as the most important reason.

A somewhere different picture emerges if we consider the most important reason but one for taking up the present studies. As second most important reason, 15% of the respondents report the toughness of the study, the duration of the study or the chances of obtaining a certificate. Labour market perspectives are mentioned by 26% of the students as the second

most important reason. The second most important reason mentioned the most is the chance of getting a job after graduation: 23% take this to be the second most important reason¹². From these findings we may conclude that labour market perspectives and study efforts are important motives for choosing a particular type of education.

The questionnaire further includes questions about study efforts and perceived labour market perspectives. Table 4 contains some descriptive statistics. We compare the self-report with some actual figures.

Nearly 75% of the students think they will graduate within the standard time set for their education, with an average of approximately 26 hours per week spent in studying.

Table 4
Average values of study efforts and perceived labour market perspectives (standard deviations in brackets)

	self-reports	actual value
perceived probability of obtaining within the nominal study duration	74.4 (22.5)	
number of hours spent on studying per week	26.2 (16.2)	
expected initial wages in a job if one entered the labour market after graduating from the previous school (net, full-time, monthly)	1,115 (481)	1,094
expected wages at age 50 if one had entered the labour market in stead of continuing in education (net, full-time, monthly)	2,555 (1,004)	
perceived probability of obtaining a job within two months if one had not continued in education	60.4 (29.8)	88.0
expected initial wages after graduation of the present education (net, full-time, monthly)	2,163 (1011)	
expected wages at age 50 after graduation in present education (net, full-time, monthly)	4,089 (1,727)	
perceived probability of obtaining a job within two months after graduating in present education	67.9 (24.2)	

On average graduates have a rather good perception of the wage they can earn after graduation. The expected initial wage after graduation is 1,155 guilders. Those who have entered the labour market after graduation earn on average 1,094 guilders. This correspondence between perception and reality is probably in part due to the relatively small variance in initial wages for graduates at these education levels.

The expected initial wage after graduating from the education one is enrolled in presently is a little over a thousand guilders higher than the expected initial wage without this education. The average expected wage increase due to the present education is nearly 50%.

Students do not have a good perception of their chances of obtaining a job after graduation. They underestimate their chances of a job. The average perceived probability of obtaining a job after graduation is 60%. Of those who entered the labour market after graduation 88% had obtained a job within two months of graduation. In general, graduates are too pessimistic about their labour market chances.

The average perceived probability of obtaining a job within two months of graduation is 68%. The average perceived chance of a job increases by 7.5 percentage points or approximately 12.5% by going into further education.

Conclusions

In this paper we have provided a theoretical and empirical analysis of choices made by individuals after attaining the age of compulsory education, and the options offered by the education system. The theoretical considerations in section 2 lead to the conclusion that, both from an efficiency and from an equity point of view, a (vocational) education system based on formal education with additional firm-related training is preferred over a completely firm-oriented training system such as an apprenticeship system or dual system.

In the empirical section of this paper we have shown that over the past years, the share of graduates of lower and intermediate education (both vocational and general) continuing in full-time education has increased. This has been at the expense of graduates entering the labour market with a lower or intermediate education level. The share of graduates entering into apprenticeships remains virtually constant. We further noted that the incidence of enterprise-related training for employed graduates has decreased between 1991 and 1993. As for the motives for continuing in full-time education, we found that the perceived labour market perspectives play an important role in choosing further full-time education. Finally, graduates have a poor and too pessimistic view of their chances of obtaining a job after graduation.

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Notes

1. However, the Dutch education system is typical in offering vocational education directly after primary school (age 12).

2. For a more extensive discussion of this topic, see Groot, Hartog and Theeuwes (1993), "The vocational integration and re-integration of individuals into the labour market and their impact on structural change, productivity and growth", Report prepared for the 5th Conference of the European Ministers of Labour, Council of Europe

3. Figures relating to 1988 taken from OECD (1992), *Education at a Glance*, OECD, Paris

4. See Haveman and Wolfe (1984) and Groot (1991) for a discussion of all private and social returns to education.

5. An important question - which we shall not address in this paper - concerns whether or not there is too much subsidisation or over-subsidisation of education? Related to this is whether individuals invest too much in education, i.e. whether workers are overeducated or overqualified. In recent years there has been a fair amount of research to demonstrate the incidence and effects of over-education. Duncan and Hoffman (1981) find that nearly 40% of the US work force in 1976 are more highly educated than their job requires. Rumberger (1981) finds that between 1960 and 1976 the incidence of over-education, defined as the discrepancy between educational attainments of workers and the educational requirements of the job, has increased. Rumberger (1987) calculates that in 1973 in the US between 11 and 17% of the workers were highly overeducated, while another 16 to 40% of the workers had between one and three years' more education than required for their job. Between 1969 and 1977 over-education did not seem to have increased. In Hartog (1985a) it is shown that in the 1960-1977 period in the Netherlands more than half the workers were neither overeducated nor undereducated for their job. In 1977 25% of the workers were overeducated and 20% were undereducated. In the 1960-1977 period the incidence of over-education strongly increased, while the incidence of under-education decreased.

In the above-mentioned studies over-education is defined by comparing the educational level attained with the education level required in the job. Verdugo and Verdugo (1989) defined over-education by the average education in a profession. For each profession (at a three digit level) they calculate the average years of schooling. If the years of education are more than one standard deviation above the average in his/her profession, the worker is considered overeducated; if his/her years of education are one standard deviation below average, he/she is considered undereducated. Verdugo and Verdugo (1989) calculate that in 1980 10.9% of the workers in the US were overeducated and 9.9% were undereducated. These figures are somewhat lower than the figures found by comparing education attained with education required in the job. For Portugal, Santos (1992) finds that approximately 11% of the workers are overeducated and 8% are undereducated. She further finds that over-education is concentrated among the most educated workers, while under-education is concentrated at the lowest education levels.

In virtually all studies it is found that over-education has an economic value. Duncan and Hoffman (1981) find, however, that the estimated return to over-education in the US is only about half the size of the return to an additional year of required education. The rate of return to over-education is between 3% and 5.2%. Each year of under-education decreases wages by 4.2% to 4.8%. Rumberger (1981) also finds that over-education yields lower but positive returns. The rate of return on a year of education required is 6.1% for males and 11.5% for females, while the rates of return on a year of over-education are 2.8% and 6.1%, respectively. Rumberger (1981) also finds that the rate of return to over-education depends on the job type. In some professions additional schooling, even if it is required for the job, does not yield a positive return. This indicates that in some jobs over-education is only partially utilized, and in some jobs over-education is not utilized at all.

Hartog and Tsang (1989) find for the US that in 1977 the individual return to a year of over-education is 5.1%. Using the same approach, Oosterbeek (1986) and Hartog and Oosterbeek (1988) estimate for the Netherlands that the rate of return to a year of over-education is 20% lower than the rate of return to a year of education required in the job. For women the loss in the rate of return due to over-education is greater than for men. Both for men and for women over-education yields positive returns: the average rate of return to a year of over-education is 5.7%, while the average return to a year of education required is 7.1%. The rate of return to a year of under-education is 4.6%. As with over-education, the rate of return to under-education for men is relatively higher than for women.

Hartog (1989) shows that at the lower job levels a high education is a disadvantage: at the lower job levels more highly educated workers earn less, on average, than less-educated workers. The economic value of correct allocation between skills required for a job and skills supplied is emphasized in Hartog (1985b) as well. Workers earn less if they are allocated to a job below their standards (overeducated), and workers earn more than average if they are undereducated for the job. The earnings differentials due to an incorrect allocation (under or over-education) can be as high as 20% or more. For Portugal, Santos (1992) finds that the rate of return to over-education is only 50% of the return to a year of education required for the job.

Verdugo and Verdugo (1989) find that overeducated workers both earn less than workers who are correctly allocated and earn less than workers who are undereducated. From this finding they draw the conclusion that the returns to education are determined by job characteristics. On average, overeducated workers earn 13% less than workers who are correctly allocated, while workers who are undereducated earn 10% more.

Tsang and Levin (1985) argue that over-education may lead to lower individual productivity by decreasing job satisfaction, adverse workplace behaviour and deterioration of work skills. Tsang (1984) is the only

empirical study which looks at the social rate of return (instead of the individual rate of return), or productivity effects of over-education. The main conclusion of this paper is that over-education has negative productivity effects. If job requirements are kept constant, an increase in the education level of the workforce would lower productivity, because the allocation of workers deteriorates. The conclusion that the social rate of return to over-education is negative contrasts with the finding that the individual rate of return is positive.

Sicherman (1991) presents evidence to suggest that there is a trade-off between (over)education and investments in other components of human capital. In this paper it is found that overeducated workers receive lower amounts of on-the-job training than workers with the required level of schooling.

Groot (1993c) examines the relation between over-education and enterprise-related training. If over-education and enterprise-related training are substitutes, the social costs of over-education are less. It is found that correctly allocated workers have the highest probability of participation in enterprise-related training, while undereducated workers have the lowest probability of participation. There is no evidence of over-education and enterprise-related training being either substitutes or complements. Irrespective of participation in training, the average return on a year of education for correctly allocated workers is higher than the average rate of return to education for under- and overeducated workers. For participants in enterprise-related schooling, the rate of return to education is higher than the average. The rates of return to under and over-education increase as well. For participants in training, the rate of return to a year of under-education becomes higher than the rate of return to a year of actual education. For undereducated workers, the wage gain of participation in enterprise-related training is higher than for a correctly allocated worker. A year of over-education decreases the wage gain of participation in enterprise-related training for participants.

6. Intermediate vocational education starts at the age of 16 and can be entered by students who have finished the lower stage of secondary education or lower vocational education.

7. One of the stumbling-blocks for implementing this reform is the question of financing the new system. The Ministry of Education takes the view that firms should finance the workplace-related training, while the employers argue that the dual training system - like the current vocational education system - should be completely government financed.

8. When the present government was established, it was agreed that the government as an employer would spend a hundred million guilders for the (additional) schooling of public sector workers.

9. Ritzén and Stern (1991) give the following reasons for potential under-investment in enterprise-related training: 1) uncertainty about the returns to enterprise-related training, 2) liquidity constraints, 3) minimum wage legislation, 4) crowding out by the existence of subsidized training for the unemployed, 5) complementarity between general and specific training, 6) transaction costs involved in signalling to other employers the outcome of general training, 7) restrictions imposed by labour contracts, and 8) unemployment insurance and transfers which facilitate the substitution of older workers by younger ones.

10. For a more extensive discussion of this topic, see Groot, Hartog and Theeuwes (1993).

11. The largest O&O fund at this moment is that of the metal and electronics industry. The Education and Development Foundation for the Metal and Electronics Industry (De Stichting Opleiding en Ontwikkeling voor de metaal en elektrotechnische industrie) started in 1983 as a response to the decline in the number of apprentices in the industry. The figures presented in this section relate to this O&O fund.

12. 43% of the respondents mention only one reason for their choice.

* Part of this paper was written while the first author was a visiting fellow at the New York State School of Industrial and Labour Relations of Cornell University.

Returns to education: Irish employers' use of educational credentials

Introduction

The objective of this paper is to examine the way in which educational qualifications are used by employers in Ireland in making decisions about whether or not to employ school-leavers and about the wages they offer them. Previous work (Breen, 1984, 1991; Hannan, 1986; Hannan and Shortall, 1991) has shown a very strong relationship between, on the one hand, unemployment rates among school-leavers after one, three and five years in the labour market and, on the other hand, educational qualifications. However, in these studies educational qualifications were measured in terms of the highest examination that young people took and whether or not they were deemed to have passed this examination. No work has as yet been undertaken to test whether or not this specification of educational qualification is the most appropriate, in the sense of reflecting the way in which employers interpret and use such qualifications and credentials¹ in making decisions about who to employ and how much to pay them. This is the topic we address in this paper. We are specifically concerned with the extent to which such decisions by employers are responsive to distinctions in qualifications. Is it the case, for example, that the chances of getting a job and the wages received in a job are sensitive to very fine distinctions in qualification-level, as measured by grade point average in an examination? Or, on the other hand, do employers use much cruder categorizations in making these decisions, focusing on the highest level of examination taken and whether or not a school-leaver passed this examination?

There is a large literature in the social sciences on the topic of the returns to education. In economics, this is often associated with "human capital" approaches, while in sociology the "status attainment" tradition (Blau and Duncan, 1967) and its development through the "Wisconsin model" (Sewell and Hauser, 1975) have been particularly influential. Economic approaches tend to take earnings as the appropriate measure of the returns to education, while the status attainment approach, as its name indicates, focuses on how education helps to determine "who gets ahead" in society's status hierarchy.²

Among criticisms that have been made of such approaches, one of the most common is that these models presuppose the existence of an "open, fully competitive market process in which individual characteristics are identified and rewarded according to their societal value" (Horan, 1978: 537). In other words, the assumptions of the approach are basically those of neo-classical economics, as imported into sociology by, for example, Davis and Moore (1945). The failure to attend to aspects of the labour market that do not conform to neo-classical assumptions leads to an over-concentration on characteristics of labour supply relative to labour demand and more recent research has sought to redress this balance.³

Another major criticism concerns the assumption that labour markets and educational institutions operate as separate institutional spheres with the former acting as a market which 'purchases' the latter's output. Recent research, however, has shown substantial differences amongst European countries and between these and the United States and Japan in the nature and degree of institutional linkages between the labour market and education/training institutions. The variation extends from the very strong institutional interconnections present in Germany - with a range of clearly defined occupations tied to relatively fixed educational and vocational preparation courses and qualifications - to the extremely loose articulation present in the United States, where job definition and training is to a large extent defined by firms, and vocational training is largely carried out within them. In addition there is considerable cross-national variation in the national validity/reliability of school certifications of performance (OECD, 1989; Rosenbaum and Kariya, 1991; Jonnson, Mills, Muller, 1993).

A number of conceptual schemata have been proposed to handle this international variation in education/labour-market linkages. One of the most useful is that proposed by Maurice et al. (1986). However, Ireland does not fit neatly within either the "qualification mobility space" or "organizational mobility space" ideal types they propose (Maurice et al., 1986; see Jonnson, Mills, Muller, 1993) to explain these national variations in education/labour market relationships. The Irish apprenticeship system is very limited - no more than 3 per cent of labour market entrants; though there is a substantial proportion of "entry positions" at the professional, technical, junior managerial and even clerical level where minimum educational and professional/vocational - technical qualifications are basic entry requirements. In addition the education system has a national highly institutionalized curriculum and examination system. So, despite the absence of any clear institutional connection between education/training institutions and labour market entry arrangements in Ireland there is a very close connection between "educational success" and "labour market entry success". There appear to be a number of reasons why this is so: a well developed and highly institutionalized educational system existing from the pre-industrial period; later industrialisation and a much smaller proportion of the labour force in large bureaucratic organizations - hence the lesser importance of internal labour markets; and persistently high fertility until 1980 - which, when combined with rapid restructuring of the economy and low employment growth, led to significant overcrowding in the youth labour market and the greater possibility for highly discriminating judgements in making initial employment decisions (see Breen et al., 1990).

Given these particular characteristics of the Irish education and labour market systems two contrasting general theoretical orientations can be used to help conceptualize the likely relationship between educational/training results and labour market outcomes. The "human capital" approach (Schultz, 1961; Becker, 1964) views education or initial vocational training as creating skills which directly enhance labour productivity. So, increasing values in educational outputs - as measured, for instance, by nationally validated examinations - should then be measurable, as productive inputs, in terms of their marginal contribution to employment/unemployment rates or wage differentials (see Freeman, 1986; and OECD, 1989). If such examination results reliably and validly measure cognitive and other skill levels attained in education and these indicate likely gains in labour productivity to employers, then one would expect that employment rates and wage levels should increase continuously and linearly with increases in examination/grade levels.

A contrasting theoretical orientation - the "sorting/ screening/queuing" (Phelps, 1972) or credentialist (Collins, 1979) view - is much more sceptical of education's role, seeing its function as that of sorting individuals mainly according to their innate abilities or productive potential: education leading to only a marginal productivity gain in and of itself. Using labour market "rates of return" to measure the labour market value of educational courses and credentials would, using this perspective, considerably inflate the productivity value of schooling received. If "the function of education is not to confer skill and therefore increase productivity and higher wages ... but ... to certify trainability and ... confer ... a certain status" (Thurow, 1972, p. 68), this would be particularly likely to hold in countries like Ireland where such examinations/certificates are nationally validated and deeply institutionalized.

For our immediate purposes, these contrasting "theories" do not yield opposing hypotheses which can be tested by our data. Both, however, raise central questions about the nature of the educational "signals" - type of examinations and grade levels - that employers use in making employment and work decisions. We know from previous work (Breen, 1984, 1991; Hannan, 1986; Hannan, Shortall, 1991) that unemployment rates vary significantly by both examination level as well as by crude "pass"/"fail" criteria - with Ireland in this respect being much closer to the Japanese than the American labour markets (Rosenbaum and Kariya, 1991). These returns to education appear (when measured in this way) to be significantly greater than in Britain (see Hannan, Hovels, Van den Berg, White, 1991.)

Besides entry to the labour market, up to a third of the total second level school leaving cohort (and almost half of those successfully completing second level education) go on to third level education. Beyond a minimum "passing grade" required, entry to the university faculties is competitive - with the most prestigious faculties such as Medicine, Law and Engineering requiring not only a minimum of four to six grade "A"s in the final Leaving Certificate examination but also a specified minimum standard in particular subjects. In this latter respect, at least, it is clear that the rules of entry to third level institutions clearly indicate their adherence to "human capital" theories of teaching/learning at second level: in that attention is paid to the number of "academic points" gained in nationally validated examinations in a range of specified subjects. Such "entry rules" continue to be used despite the fact that there is only a moderate correlation between final Leaving Certificate examination grades and first year

university examination results - though they appear to be far more predictive than scholastic aptitude or general intelligence tests (see Moran and Crowley, 1979).

Given the high degree of institutionalization of the post-primary curriculum and examinations and the serious overcrowding in the youth labour market, we hypothesise that employers will use the full range of ordinarily measured examination grades in making their employment decisions.

One way of deciding which specification of education is most salient in employment decisions would be to ask employers how they use educational qualifications in making such decisions. Another approach, and the one we use here, is to test different specifications of education within a model of labour market attainment and see which, if any, best explains variation in this area. To do this we use data from the annual Irish School-leavers' Survey (SLS) for the years 1988, 1989, 1990 and 1991: hence we are focusing on returns to education early in young people's careers. We focus on two measures of returns to education: these are the probability of having a job one year after leaving school, and, for those who have a job, earnings per hour. We specify a baseline model for each of these: we then include education effects specified in a number of different ways and test which specification has the greatest explanatory power.

Before we proceed to this analysis, however, we provide some information on the Irish educational system, the nature and level of qualifications of school-leavers entering the labour force over the 1980s, and a summary of published information on the relationship between qualification level and employment chances.

Irish educational qualifications

Ireland's second level curriculum and examination system is national, comprehensive, and highly age- or stage- graduated. There is a single national curriculum for all subjects taught at second or post-primary level, with a significant number of obligatory subjects. There is now (since 1992) one single junior cycle examination - taken at the end of three years of post-primary education (usually at age 15). Previously there had been two: one, the Group Certificate, the residue of the older, pre-1970s, separate Vocational School system; and the Intermediate Certificate - for the much larger and higher status Secondary/Grammar school system. At the end of the senior cycle - after five or six years of post-primary education, at 17/18 years old - there is also a terminal school-leaving certificate, the Leaving Certificate. All examinations are nationally set, monitored and examined. Almost 95 per cent of all school-leavers will have taken at least one such examination. So, it is possible to calculate for almost all school-leavers a nationally validated "grade point average" score for the highest level of examination taken at second level.

The official school leaving age is 15 - with, however, about 3 per cent of school-leavers dropping out before they reach that age. Over 90 per cent are still present in full-time education by age 16, dropping to 74 per cent by age 17 - when the great majority take their final Leaving Certificate examination. The normal transfer age from primary schools is 12, though over 30 per cent of the cohort are 13 or over before they do so. (Department of Education, Statistics Report, 1989/90). As a result the percentage leaving before 15 is not a good indicator of those leaving before taking any junior cycle examinations; which was between 6-7 per cent at the end of the 1980s (see Table 1). In addition about 20 per cent leave school after having taken the junior cycle examinations. The remaining 75 per cent or so leave having completed the full (5-6 year) second level course and having taken the Leaving Certificate examination.

Our information about what happens to young people when they leave post-primary education in Ireland comes from the annual school-leavers' surveys (SLS), which have been carried out at the ESRI since 1980 (and which are described in more detail below). For a sample of about 2,000 school-leavers annually, this survey gathers detailed information on both subjects (and course levels - higher or lower) taken and the grade received, in the last or highest examination taken. Letter grades are used - A (or now A+ and A-), B, C, D, F, NG; "D" being the minimum "passing" grade accepted. Almost all students take a minimum of 8/9 subjects in the junior cycle and 6/7 in the senior cycle examinations. Each subject course/examination can be taken at either "Higher" (or "Honours") or "Lower" ("Ordinary" or "Pass") levels: so the numerical values agreed to be assigned to grades for University entrance, for instance, vary depending on both "level" and letter grade achieved.⁴

The annual published analyses of the school-leavers' surveys use only "last examination taken" as a discriminator. So such school-leavers are categorised as leaving school and entering the labour market at four examination defined stages:

1. Before taking any junior cycle examination - usually at or before 15.
2. With a "Group Certificate" (vocational schools) - usually at age 15.
3. With an Intermediate Certificate (at 15-16).
4. With a Leaving Certificate (at 17-18).

For most purposes 2 and 3 are amalgamated as there appears to be little difference in the "market value" (in unemployment rates at least) of both examinations. Table 1 below shows the percentage distribution of all school-leavers from 1979 to 1990. These estimates are based on aggregations of two years' SLS (thus giving samples of around 4,000).

It is quite clear that over the decade there has been a substantial increase in qualification levels of school-leavers. Since, however, an even more rapidly increasing proportion of these went on to university and other third level education (see Table 2) the actual qualifications of those directly entering the labour force changed much less (see Table 3): from 51 per cent having a Leaving Certificate in 1979/1980 to 61 per cent in 1989/1990.

Table 1: Qualifications of all school-leavers 1979 to 1990. Two contiguous years of samples are amalgamated for each estimate

School leaving years	No Qualification ("Dropouts")	Group/ Intermediate Certificate	Leaving Certificate	Estimated Cohort Size*
Per cent				
1979/80	9.1	26.7	64.2	64,400
1983/4	8.1	25.0	66.9	61,800
1987/8	6.8	22.9	70.3	67,300
1989/90	6.1	18.1	75.8	67,200

Note: *This is the estimated size of the total annual school leaving cohort. The annual sample interviewed is c. 2,000. The amalgamated two year samples are, therefore, c. 4,000.

Source: Annual School-leavers Surveys, Department of Labour and ESRI, Dublin.

Table 2, which shows the main destinations of school-leavers, reveals an extraordinary decline in the percentage of the cohort in employment: 64 per cent in 1979/80 to 38 per cent by 1989/90. Three factors are at work here. First a growth in unemployment in the first part of the decade, which was then reversed, with unemployment declining until 1989/90; second, the rapid and continuous growth in *mainly* third level education - which increased constantly from 22 to 36 per cent of the school leaving cohort - over the decade; and finally, emigration increased substantially from almost none to almost one tenth of the cohort by 1989/90. As a result, the proportion of second level school-leavers who directly entered the Irish labour force declined from 74 to 54 per cent over the decade. In addition, there was also a substantial growth in retention of students in full-time second level academic courses, as well as in post-educational vocational training courses in second level schools - from almost zero in 1979/80 to almost half of those directly entering the labour force from second level schools in 1989/90.

Table 2: Main destinations of school-leavers 1979 to 1990

Employment Status	1979/80	School leaving years		1989/90
		1983/84	1987/88	
		Per cent		
(1) Employed	64.0	43.5	42.2	38.1
(2) Unemployed	10.0	26.3	17.6	15.5
(1+2 on State schemes) (n.a.)		(7.7)	(4.1)	(3.3)
(3) Students*	22.1	26.1	30.7	35.6
(4) Other	3.9	4.1	9.5	10.9
(Emigrated)	(1.7)	(2.7)	(8.4)	(9.0)
Size of Cohort	64,400	61,800	67,300	67,200

Note: * Full time and mostly third level students

Source: Annual School-leavers' Surveys, Department of Labour, Dublin; and Breen, Whelan, with Costigan, ESRI, 1986.

Finally, Table 3 gives the unemployment rates one year subsequent to school leaving for those who did enter the Irish labour force. The main results of this show two main trends; of a substantial/inequality in unemployment rates by level of examination over the whole decade, in a ratio of around 2.5:1 between those leaving without any qualifications and those with a Leaving Certificate; and secondly that, with one exception, these inequalities remained relatively stable between the beginning and end of the decade. This occurred despite the fact that the unemployment rate at the end of the decade was more than twice the level of that at the beginning (at 13.5 and 29.0 per cent respectively). The one exception is the mid 1980s - particularly 1984-1986 - when the total unemployment rate averaged almost 40 per cent. When that occurred, unemployment became spread much more evenly across the qualification spectrum. But as the situation improved significantly after the mid 1980s, employment chances improved much faster for the better qualified - with the unemployment rate for the most poorly qualified showing little change.

Table 3: Unemployment rates of school-leavers by last examination taken one year after they had left school and for those entering the labour market: 1979/80 to 1989/90.

Combined 2-year school-Leaving Cohorts	No qualifications (Left before Junior Cycle Examination)	Level of qualifications Group/Inter. (Completed Junior Cycle)	Leaving Cert. (Completed Senior Cycle)	Total
1979/80		Per cent		
Unemployment Rate:	26.8	12.6	10.4	13.5
(% Dist. of People in L.F. x Quals)	(11.5)	(37.1)	(51.4)	(100)
(% Dist. of Unemployed)	(22.7)	(34.5)	(39.6)	(100)
1983/84				
Unemployment Rate:	57.0	37.2	34.3	37.8
(% Dist. in L.F.)	(10.8)	(34.3)	(54.9)	(100)
(% Dist. of Unemployed)	(16.3)	(33.8)	(49.9)	(100)
1987/88				
Unemployment Rate:	59.9	34.1	20.9	29.5
(% Dist. in L.F.)	(10.4)	(34.3)	(55.3)	(100)
(% Dist. of Unemployed)	(21.1)	(39.8)	(39.2)	(100)
1989/90				
Unemployment Rate:	52.4	31.8	23.7	29.0
(% Dist. in L.F.)	(10.3)	(28.9)	(60.8)	(100)
(% Dist. of Unemployed)	(18.6)	(31.7)	(49.7)	(100)

Source: Calculated from Annual School-leavers' Surveys, 1980 to 1991.

So, there are very clear advantages in the probability of employment associated with increasing levels of educational qualifications. Whether this advantage also extends to increasing grade levels achieved in these examinations is explored in depth in the following analyses.

Data

The data used in this paper come from the annual School-leaver Surveys which have been carried out each year since 1980 by the Economic and Social Research Institute on behalf of the Department of Labour (now the Department of Employment and Enterprise). The population surveyed is all young people who left the second-level or post-primary educational system during the previous school year: thus the 1980 survey covered the 1978-79 cohort of-leavers, the 1981 survey the 1979-80 cohort, and so on. The annual sample size is a little over 2000, or roughly 3 per cent of the total cohort and it is drawn at random from lists supplied by a sample of 200 schools (roughly a quarter of all post-primary schools), stratified by type, gender-mix and region. At the time of the interview, the majority of respondents had been out of school for almost one year. The survey is representative of school-leavers from all levels of the post-primary system, ranging from those who have left without sitting for any public examination to those who have completed the Leaving Certificate.

We use data from the 1988, 1989, 1990 and 1991 surveys - these cover young people who left school between June 1987 and June 1990.⁵ The SLS provides information on the post-school destinations of these samples. Annually over 30 per cent of the cohort continue their education at a higher level, but, for the purposes of this analysis we exclude all those who did not enter the labour market on leaving school (so, university and other third-level education entrants are excluded).

Measures

We use two measures of "returns" to education; these are:

- (1) whether or not a young person had a job at the time of the survey (that is, approximately one year after leaving school). This variable (called WORKING) is thus a dummy, scoring 1 if the person had a job, 0 otherwise;
- (2) the earnings per hour of those young people who had a job. The variable we use is the logarithm of this quantity which was computed by dividing the respondent's gross earnings per week by the number of hours worked in the previous week. The variable is called LOGEARN.

We then specify models to account for these two outcomes. We include a number of background variables as follows:

- (1) father's social class (using the six point Irish Central Statistics Office (CSO) social class scale). This is entered into the models in the form of five dummy variables for classes 2 through 6 called FACCLASS2 through FACCLASS6.
- (2) age, in years (AGE).
- (3) whether or not the respondent's father has a job (FATHERJOB, a dummy variable scoring 1 if yes, 0 no).
- (4) whether or not the respondent's mother has a job (MOTHERJOB, a dummy variable scoring 1 if yes, 0 no).
- (5) a dummy variable, RURAL, indicating whether the respondent lives in a rural (RURAL=1) or urban area.
- (6) three dummy variables (1989, 1990, 1991) indicating which survey the data were collected in.

These variables are included in all our models. We measured education in a number of ways. We first distinguished the highest level of examination taken by each respondent in terms of whether the respondent had left without sitting for any public examination; left after sitting for a junior cycle examination (Group Certificate and/or Intermediate Certificate); or left after sitting for the Leaving Certificate. We capture these differences using two dummy variables: JC (=1 if left after a junior cycle examination) and LC (=1 if left after the Leaving

Table 4: Descriptive Statistics (N=3102 Except for LOGEARN Where N = 1931)

Variable	Mean	Standard Deviation
WORKING	0.61878	0.48576
FACCLASS2	0.12848	0.33468
FACCLASS3	0.16049	0.36712
FACCLASS4	0.32619	0.46889
FACCLASS5	0.13725	0.34417
FACCLASS6	0.18986	0.39225
AGE	17.447	1.2686
FATHERJOB	0.64990	0.47708
MOTHERJOB	0.15545	0.36240
RURAL	0.41121	0.49213
1989	0.27332	0.44573
1990	0.23843	0.42619
1991	0.23143	0.42181
LOGEARN	2.3328	1.0781
JC	0.31042	0.46274
LC	0.58191	0.49333
GPA	1.3153	1.4569
PASSD+	5.1322	2.3157

Certificate). This measure of education is included in all our models. We then specified four additional, alternative specifications of the effects of education as follows:

- (i) the grade point average (measured as defined in footnote 4) achieved in the respondent's last examination before leaving school. We do not distinguish between performance in Group and Intermediate Certificate, labelling both of these as a junior cycle examination. This measure (called GPA), of course, applies to those who score 1 on either JC or LC, with a score of 0 for those who left school before sitting for any examination.
- (ii) a set of dummy variables which describe the range of the GPA average measure.
- (iii) the number of papers passed at each grade from D or higher in the respondent's last examination. This set of variables is called PASSD+ (number of papers passed at D grade or higher), PASSC+, PASSB+ and PASSA.
- (iv) the number of papers passed at the ordinary or "pass" level at each grade from D or higher in the respondent's last examination and the number of papers passed at the higher or "honours" level at each grade from D or higher in the respondent's last examination. This gives a total of eight variables.

We include one of these specifications in each of the models that we fit.

Omitting all those who did not enter the labour market from school and excluding all those who had missing values on one or more of our measures, we are left with a sample size, for the four years, of 1,545 men and 1,557 women. Of this total of 3,102, 1,931 had a job at the time of the survey. The means and standard deviations of the most important of these variables are shown in Table 4.

Modelling strategy

In modelling the returns to education, we fit separate models to men and women, since previous research has suggested the existence of a good deal of difference between the genders in the pattern of returns to education (see, for example, Breen 1984, 1991).

Our analysis starts by focusing on the probability of having a job, which we model using a probit. This assumes that there is an underlying or latent variable which measures the likelihood of having a job, but which we only observe if that likelihood is sufficiently strong to result in the individual having a job. That is:

$$y1^* = \sum_{i=1}^{12} \alpha_i z_i + \sum_{j=1}^J \alpha_j x_j + u \quad (1)$$

Here u is a standard normal error, $y1^*$ is our latent variable, the z variables are our 12 background variables and the x variables are our measures of education. We observe the variable WORKING according to

$$\begin{aligned} \text{WORKING} &= 1 \text{ if } y1^* > 0 \\ \text{WORKING} &= 0 \text{ if } y1^* < 0 \end{aligned}$$

We then proceed to test four different specifications of education, as follows:

Model (1): the education effects are the two dummy variables, JC and LC, plus GPA and the interaction between LC and GPA. Fitting this interaction allows the effects of performance in the examination on the chances of getting a job to vary, depending on which examination the respondent took before leaving school. This model then fits the 12 background variables plus four education variables.

Model (2): this includes JC and LC but replaces GPA with six dummy variables representing disjoint ranges of GPA scores and with six interaction terms between LC and these dummy variables. This model is basically the same as (1), except that replacing the linear GPA with the dummy variables permits us to test whether or not the effect of GPA on getting a job is linear or whether, for example, there is a threshold of performance which is particularly crucial in getting a job.

Model (3): once again this includes JC and LC, but now we model education in terms of the number of papers passed at each grade in the form of the variables PASSD+ through to PASSA. We also fit interactions between LC and these variables, once again to allow the effects of performance on getting a job in the examination to vary, depending on which examination the respondent took before leaving school.

Model (4): this is identical to model (3) except that we distinguish between passes at the ordinary and higher levels. Once again we fit interactions with LC.

These models, then, fall into two pairs. Models (1) and (2) measure educational performance in terms of educational level (highest examination sat for) and grade point average within that examination (if any): the difference between the two is that, while model (1) posits that the effect of GPA is linear, model (2) allows for non-linearities. Models (3) and (4) measure educational performance in terms of the number of papers passed at various levels. *Traditionally five grade D passes was considered the minimum result which counted as an overall "pass" for an examination.* If employers are using this in making hiring decisions it should show up in this specification. The difference between these two models is that (4) adds the ordinary/ higher distinction.

Modelling the probability of having a job

Table 5 shows the results of fitting the model of equation (1) with the four different specifications of education. Specifically we report the log-likelihood statistics associated with each model, and also with the "zero-slopes" model. The latter is a baseline model which sets the effect of all the variables to zero. The difference between this and the log-likelihood of any other model is a measure of the explanatory power of the variables included in the latter model. Minus twice the difference in the log-likelihood values of any two models, one of which is nested in the other, has a chi-square distribution, with degree of freedom given by the difference in the number of parameters in the models. This fact can then be used to construct tests for the significance of sets of variables.

Table 5: Probit models. log-likelihood values

	Zero slopes	Model			
		(1)	(2)	(3)	(4)
Parameters		16	24	22	29
Men (N=1545)		-1049.44	-946.93	-958.18	-941.01
Women (N=1557)		-996.51	-879.81	-879.51	-875.29
					-935.73

The closer the log-likelihood is to zero, the better the model's fit to the data. On this basis, model (4) (the specification using the number of passes at each grade at ordinary and higher level) fits best. However, this model also uses the most parameters. If we compare model (4) with model (3) (model (3) being nested in model (4)) then minus twice the difference in their log-likelihoods gives a chi-square value of 10.56 with 29-22=7 degrees of freedom. This is not a statistically significant difference, showing that model (4) is not a significantly better fitting model than model (3). Using the same test, model (2) proves not to be a better fitting model than (1): indeed, although (2) uses 24 parameters, as against 16 for (1), it is a poorer fit to the data in absolute terms. So, from our two pairs of models, (1) and (3) are the ones we provisionally accept. This result tells us that in the chances of getting a job, there is no evidence of non-linearity or "threshold" effects in the impact of grade point average in last examination; and that the distinction between ordinary and higher level passes is not relevant when assessing the impact of the number of passes on the chances of having a job. Comparing models (1) and (3), then, we see that, although (3) has a log-likelihood marginally closer to zero, it fits six more parameters than model (1). On this basis, then, we should prefer the latter as the more parsimonious of the two.

In order to compare models (1) and (3) more closely, we then examined their coefficients. In model (3) the strongest predictor among our measures of the number of passes at different grades was the number of passes at D or more (PASSD+). We then refitted the model omitting all the other measures of the number of passes and including only PASSD+. The log-likelihood for this model (model (5)) is shown in Table 6. We also fitted the model including PASSD+ and its interaction with LC: this is model (6) in Table 6. Neither (5) nor (6) are a poorer fit to the data than model (3), which indicates that the number of passes at grade D or higher captures all the significant impact of education when conceptualized in terms of the number of passes. Models, (5) and (6) do not differ significantly in their log-likelihoods, showing that the LC*PASSD+ interaction is not significant.

Table 6: Modified Probit Models: Log-Likelihood Values

	(5)	Model (6)	(7)
Parameters	15	16	15
Men	-950.85	-950.25	-947.26
Women	-891.75	-891.75	-880.41

Turning to model (1), here the interaction between GPA and LC was not significant, and so we refitted the model omitting it. This is model (7), whose log-likelihood is shown in Table 6. Comparing this with model (1), Table 5, we see that the omission of the interaction term does not yield a poorer fitting model. This tells us that, once we take account of which examination a young person sat for, the increments (in terms of the chances of having a job) to higher levels of performance, as measured by Grade Point Average, are the same, regardless of whether this was a junior cycle or Leaving Certificate examination.

Our final comparison, then, is between models (5) and (7). They fit exactly the same number of parameters, each allows for an affect associated with the overall level of education reached, but they measure performance differently. In (7), performance is measured by grade point average, in (5) by the number of papers passed at grade D or above. In (7), then, the education effect is taken to be continuous: the better a young person performs, the higher his or her chances will be of getting a job. In (5), we are positing a threshold effect: the number of passes at grade D or above is the crucial determinant of the chances of getting a job.⁶ It is clear from our results that model (7) is to be preferred. If we measure returns to education by the probability of having a job after one year, then it seems that the effect of education is highly discriminatory in so far as not only are differences in the level of education attained important, but so are differences in performance within examinations. In deciding who to hire, employers do not seem to only rely upon rather crude measures such as the number of papers passed.

Modelling earnings in a job

Our second measure of returns to education is earnings in a job. Clearly, only those young people who had a job after one year could have a valid score on this measure. For these young people we can write their earnings function as

$$\log(\text{earnings per hour}) = \sum_{i=1}^{12} \beta_i z_i + \sum_{j=1}^J \beta_j x_j + e \quad (2)$$

Here the z variables are the 12 background variables, the x s are our education measures and e is a normally distributed error term. Equations (1) and (2) form a two-equation system such that the log of earnings per hour is observed only if $WORKING=1$. These two equations can only be estimated separately if we are sure that there is no residual correlation between their respective error terms, u and e . Unfortunately, this is not very likely, since there will almost certainly be variables which we have not measured and which influence both the chances of getting a job and earnings in a job. The existence of such unmeasured variables will lead to a non-zero correlation between u and e . In this case, then, the two equations should be estimated simultaneously. We do this using maximum likelihood.⁷ This procedure yields parameter estimates of both equations (that is, of the s (from equation (1)) and the s (from equation (2)) and also of the correlation between the two equations' error terms.

In fitting these maximum likelihood models we specified the first part of the model (whether or not an individual has a job) to be the same as model (7) - that is, we entered the educational effects as the dummy variables JC and LC and the GPA measure. In the earnings part of the model (equation (2)), we then tested the four different specifications of the education effect which we discussed above. The results are given in Table 7, where the columns labelled (8) through (11) correspond to models which use the specifications of education (i) through (iv).

In this case the results are very clear-cut. Model (8), using GPA (specification (i)), is the best fitting model among men: this is despite the fact that it fits fewer parameters than the other three models. Among women, model (11) has a lower log-likelihood than (8) but it fits very many more parameters, and on grounds of parsimony, (8) (which has a lower log-likelihood

than (9) and (10)) is to be preferred. So we conclude that, when we measure returns to education by earnings, grade point average is the best way to specify educational effects. In this case, however, we find that the effects of GPA differ depending on which examination a young person took before leaving school.

Our final analysis examined whether these educational effects had been constant over the four years' data that we used. We tested for this by fitting interactions between JC, LC and the grade point average measures, respectively, and the dummy variables for the years 1989, 1990 and 1991. The results are given in Table 8. Here the log-likelihood values for model (12) should be compared with those for model (7) of Table 6, and those for model (13) with model (8) of Table 7. In neither case is minus twice the difference in the log-likelihoods statistically significant, indicating that there is no evidence that education effects have changed over this period. This is not surprising. The overall probability of a school-leaver having a job may well have varied, but, as we noted in our discussion of Table 3, the educational relativities have remained constant over this period.

Table 7: Maximum likelihood "Heckman" models: log-likelihood values

	<i>Zero slopes</i>	(8)	Model (9)	(10)	(11)
Parameters		32	40	38	45
Men	-2474.14	-2146.40	-2241.84	-2165.81	-2226.86
Women	-2481.48	-2229.42	-2270.90	-2275.50	-2223.45

Table 8: Tests of change over time in education effects: log-likelihood values

	(12) Probit	Model (13) (Heckman MLE)
Parameters	24	53
Men	-938.33	-2129.22
Women	-874.61	-2217.16

The parameter estimates for our final model (model (8)) are given in Tables 9 (for men) and 10 (for women). In each case, the first 16 parameters relate to the chances of getting a job, while the next 16 parameters relate to the logarithm of earnings per hour. The two final parameters - and - are, respectively, the standard error of the log of hourly earnings and the correlation between the error terms of the two equations (i.e., between u and e). For both men and women this correlation is very high, showing that the omitted variables which influence whether or not a young person had a job are probably the same as those which affect how much they will earn if they have a job.

Interpretation of results

Turning first to the coefficients relating to the probability of having a job one year after leaving school, we see that, of the background variables, whether or not the respondent's father had a job (FATHERJOB) and some of the year dummies (1990 among men, 1989 and 1990 among women) are the only ones which are significant. The education effects, however, are all statistically significant. So, the coefficient for JC shows the increase in the probit for those who sat for a junior cycle examination compared with those who left without sitting for any examination. The LC coefficient shows the increase in the probit for those who sat for the Leaving Certificate, compared with those who left without sitting for any examination. The difference between those who sat for the Leaving Certificate and those who sat for a

Table 9:
Maximum Likelihood Estimates of Model (8): Men
Log-Likelihood -2146.401
First 16 estimates are probit equation

Variable	Coefficient	Standard Error	t-Error
Constant	-0.20071	0.6141	-0.327
FACLSSS2	-0.45943E-02	0.1497	-0.031
FACLASS3	0.21169	0.1395	1.518
FACLSSS4	-0.18933	0.1347	-1.406
FACLASS5	-0.10406	0.1516	-0.686
FACLASS6	-0.26674	0.1478	-1.805
AGE	-0.24384E-01	0.3725E-01	-0.655
FATHERJOB	0.35109	0.7015E-01	5.005
MOTHERJOB	0.12954	0.9242E-01	1.402
RURAL	-0.49280E-01	0.6653E-01	-0.741
1989	0.12864	0.9111E-01	1.412
1990	0.19420	0.9316E-01	2.085
1991	-0.46740E-01	0.9168E-01	-0.510
Education:			
JC	0.38574	0.1263	3.055
LC	0.48258	0.1565	3.084
GPA	0.23009	0.2877E-01	7.998
Constant	-2.4352	0.8654	-2.814
FACLSSS2	-0.62104E-01	0.1863	-0.333
FACLASS3	0.22509	0.1737	1.296
FACLSSS4	-0.17355	0.1697	-1.023
FACLASS5	-0.52152E-01	0.1999	-0.261
FACLASS6	-0.39881	0.1944	-2.052
AGE	0.14634	0.5240E-01	2.793
FATHERJOB	0.28869	0.9654E-01	2.990
MOTHERJOB	0.19652	0.1240	1.585
RURAL	0.30307	0.9049E-01	3.349
1989	0.23616	0.1247	1.893
1990	0.45181	0.1254	3.603
1991	0.19200	0.1236	1.554
Education:			
JC	0.57512	0.1892	3.039
LC	0.47161	0.2202	2.141
GPA	0.57181E-01	0.7392E-01	0.774
LCGAP	0.23958	0.7308E-01	3.278
Sigma	1.4369	0.3428E-01	41.911
Rho (1, 2)	0.98096	0.6679E-02	146.871

Table 10:
Maximum likelihood estimates of model (8): women
Log-Likelihood -2229.417
First 16 estimates are probit equation

Variable	Coefficient	Standard error	t-error
Constant	-1.6222	0.5720	-2.836
FACLSSS2	0.20396	0.1759	1.159
FACCLASS3	-0.29763E-01	0.1744	-0.171
FACLSSS4	0.76488E-01	0.1623	0.471
FACCLASS5	-0.15542	0.1783	-0.872
FACCLASS6	-0.77070E-01	0.1755	-0.439
AGE	0.46290E-01	0.3275E-01	1.423
FATHERJOB	0.46655	0.7232E-01	6.451
MOTHERJOB	0.75379E-01	0.9187E-01	0.820
RURAL	0.82113E-01	0.685 1E-01	1.199
1989	0.21158	0.9158E-01	2.310
1990	0.20213	0.9360E-01	2.160
1991	-0.4563 1E-01	0.9530E-01	-0.479
Education:			
JC	0.52395	0.1393	3.762
LC	0.60420	0.1529	3.953
GPA	0.16256	0.2597E-01	6.259
Constant	-2.0515	0.6603	-3.107
FACLSSS2	0.49418E-01	0.1802	0.274
FACCLASS 3	-0.81278E-01	0.1804	-0.451
FACLSSS4	0.22990E-01	0.1713	-0.134
FACCLASS5	0.22593	0.1936	-1.167
FACCLASS6	0.38223	0.1882	-2.031
AGE	0.14087	0.385 1E-01	3.658
FATHERJOB	0.21565	0.8103E-01	2.661
MOTHERJOB	0.55886E-01	0.9165E-01	0.610
RURAL	0.25047	0.7250E-01	3.455
1989	0.10234	0.9906E-01	1.033
1990	0.32913	0.9892E-01	3.327
1991	0.30328	0.1014	2.990
Education:			
JC	0.51312	0.1908	2.690
LC	0.82235	0.1986	4.140
GPA	0.27188	0.7563E-01	3.595
LCGAP	-0.11293	0.763 1E-01	-1.480
Sigma	1.2054	0.3233E-01	37.283
Rho (1, 2)	0.93169	0.1653E-01	56.363

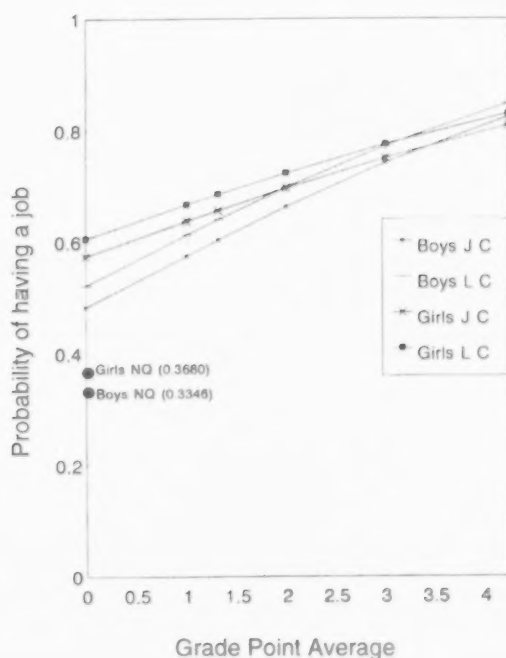
junior cycle examination is thus given by the difference in these coefficients: $.483 - .386 = .097$ for men; $.604 - .523 = .081$ for women. The coefficient for GPA then shows that the value of the probit (and thus the chance of having a job) increases, the higher the grade point average in the final examination. So, each additional grade point (at either a junior cycle examination or at the Leaving Certificate) increases the probit by 0.23 among men and by 0.163 among women. These results are shown in Graph 1.⁸

In Graph 1 the two points labelled "Girls NQ" and "Boys NQ" show the estimated probability of having a job one year after leaving school among girls and boys who sat for no examination. The points higher on the vertical axis show the probabilities for boys and girls who left after sitting for a junior cycle examination or the Leaving Certificate but who failed all papers. The four lines then show how higher levels of performance increase this probability at both examinations and for both men and women. There is clearly a large gap between those who

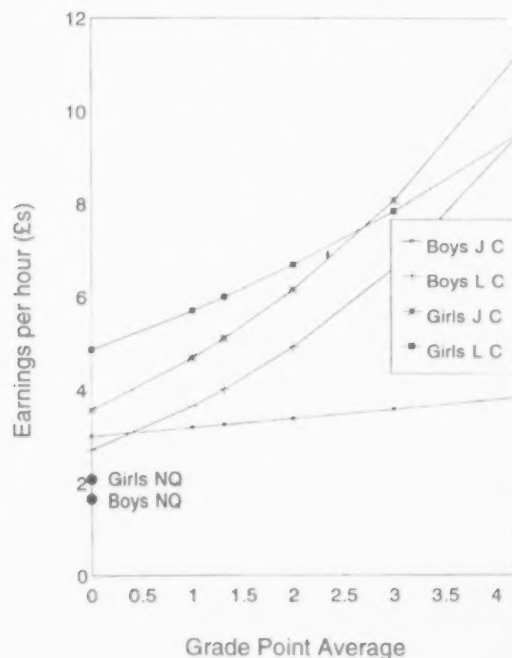
leave prior to sitting any examination and those who leave after sitting for an examination, even if they perform poorly in this examination. Among those who sat for some examination, the slopes for women are rather flatter than those for men, showing that differences in performance within the junior cycle examination or within the Leaving Certificate has a greater effect on men's chances of getting a job than on women's. The graph also shows that a good performance in any examination is associated with a relatively high probability of having a job and, therefore, those who do even reasonably well in a junior cycle examination and then enter the labour market have a better chance of a job than those who sit for the Leaving Certificate and perform poorly.

In the lower parts of Tables 9 and 10 we report the coefficients relating to the log of

Graph 1:
Estimated probability of having a job



Graph 2:
Expected hourly earnings



earnings per hour. Several of the background variable have significant effects, but once again we concentrate on the education effects, which are shown in Graph 2. This plots expected hourly earnings against grade point average. As before, the two lower points on the vertical axis relate to expected earnings among those who leave school without sitting for any examination - around £2 per hour for both men and women. Above this are the four lines for the two levels of examination and for men and women. The line labelled "Girls JC" should be treated with some caution, since there are relatively few girls who terminate their education at this level. The graph shows that, among boys, the returns to higher levels of performance at a junior cycle examination are very small, this line being almost flat. Conversely, the returns to Leaving Certificate performance are very high, particularly among boys, although, at this level, girls tend to earn more.⁹

Conclusions

In this paper we sought to discover which, if any, measures of educational achievement amongst school-leavers best predicted variations in employment and wage rates; using various models measuring returns to education. In our case we focused on returns to education at a very early point in the career, namely one year after leaving school, and we focused on two measures of returns. These were the probability of having a job one year after

leaving school, and the hourly wage among those who had a job. We tested four different ways of operationalizing education, two of which involved the use of a dummy variable for the level of public examination reached and a continuous score of performance in that examination, and two of which measured performance discontinuously involving the use of dummy variables measuring performance within an examination in terms of the number of papers passed at different grades. For both our measures of returns to education we found that examination performance was best captured by the model using (continuous) grade point average. Those models which allowed for non-linearities in the returns to different levels of performance either performed more poorly than such a model or proved to contain redundant parameters.

Our results show that there is a large gap in the returns to education between those who sit for some public examination and those who do not, but among those who sit for an examination there is some overlap in returns, in the sense that, particularly when we focus on the probability of having a job, a good performance at the junior cycle examination offers higher returns than a poor performance at the Leaving Certificate.¹⁰ This effect is not so evident, however, when we focus on earnings.

Educational, and other qualifications only have value in the labour market to the extent that employers make use of them. In turn, employers' use of such qualifications depends upon how they interpret or conceptualize them. So, before we can determine what the returns to education might be, we must first decide how to measure education¹¹ and clearly we should want to adopt, as our measure, one which corresponds most closely to how education is perceived by those who determine what these returns will be, notably employers. In this paper we have sought to do that by testing a variety of ways in which educational qualifications might be measured. We find that, in Ireland, labour market returns to education among school-leavers, measured as the chances of having a job and earnings in a job, are highly sensitive both to the level of education reached (measured by highest public examination sat) and the level of performance at that level (measured by grade point average in that examination). Cruder measures of education, including the basic pass/fail distinction proved much less adequate. This strongly suggests that employers are indeed making use of quite fine educational differences when making decisions about who to employ and what wages to pay.

We have argued that this result is to be expected, given the existence of a national post-primary curriculum and public examination system, coupled with an overcrowded youth labour market. In this context, examination results provide a readily available and finely gauged yardstick for selection. This permits employers to make decisions about which applicants to reject in a relatively straightforward way, and also allows them to set hiring criteria so as to select those with the highest levels of qualification (as both human capital and screening theories would predict). On the other hand, because of the general, rather than specialized, courses that pupils follow in post-primary education, the smallness of the apprenticeship system, and the weak institutional links between education and employment, it seems likely that the *kinds* of qualifications obtained by school-leavers in terms of subject area are of rather less significance in the labour market (at any rate among those who enter the labour market directly from school). Thus Ireland appears to present a case in which employers place little emphasis on one aspect of qualifications (what we might term the qualitative aspect) but place a great deal of importance on the other (the quantitative aspect).

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Notes

- In many cases, of course, the decision of 'how much to pay' a young employee is really a decision about whether to employ and, if so, at what level or grade, since, particularly in large or unionised places of employment, wage levels are fixed.
- Though some sociological studies have examined earnings: for example Psacharopoulos (1977).
- The whole area of social mobility research, for example, focuses on processes that occur within the constraints of a given occupational structure (Goldthorpe, 1980/87).
- The previously most popular numerical grading system was the following:

	A	B	C	D	E	F	NG
Honours Level	5	4	3	2	0	0	0
Pass Level:	2	1	0	0	0	0	0
- The total sample sizes were: 1988 = 1981; 1989 = 1990; 1990 = 1964; 1991 = 1974.
- We also fitted a model which replaced the number of passes at D or higher with a dummy variable which represented the conventional idea of a pass *versus* a fail at the last examination: in other words, this dummy variable scored 1 for all respondents who secured five or more grade Ds or better, zero otherwise. For both men and women this model fitted more poorly: the log-likelihoods (with 15 df) were, respectively, -960.28 and -894.46, which compare unfavourably with those of model (5), Table 6.
- The model is exactly the same as the maximum likelihood version of the well-known Heckman (1977, 1979; Maddala 1983) sample selection bias correction model.
- The data in Graphs 1 and 2 are plotted at the mean values of all background variables (for men and women as appropriate).
- Note that the graph extends more than two standard deviations above mean GPA.
- One implication of this is that if level of education is measured only in terms of the highest examination sat, the variation within each level will be very great.

Competition on the labour market

An analysis of the position of types of training

Introduction¹

There is no exclusive relation between a type of training and an occupation. On the one hand, graduates can hold different occupations, while, on the other hand, employers can recruit graduates from different types of training. Although in general the concept of an exclusive relation between training and occupation might be called 'naïve' and unrealistic (Van Hoof and Dronkers, 1980), the reverse concept of total flexibility can also be called unrealistic. As De Grip and Heijke (1988) point out, most types of training will take a position between these two extremes. This means that types of training will usually give access to a limited number of occupations and, conversely, employers will have some substitution possibilities when recruiting personnel for a particular occupation. Exceptions exist in the professional segments of the labour market, like health care and education, where recruitment for a job is governed by strict rules and criteria, the most important being the possession of certain training certificates. Here, the types of training involved have an exclusive occupational domain and, as a rule, there is no competition from outside.

For a sound understanding of the processes which take place at the labour market, knowledge about the structure of the labour market and its segments plays a very important role. The labour market situation of one type of training can not be understood without taking into account the labour market situation of other types of training. On the other hand, however, one must not neglect the fact that substitution possibilities and therefore competition between types of training are limited. Therefore, to grasp the way the labour market functions, e.g. the formation of wages, education specific levels of unemployment, allocation, or (self-)selection processes, it is essential to have an adequate description of the actual segmentation of the labour market.

Mostly, this segmentation of the labour market, if recognised, is brought into the analysis on theoretical grounds. These concepts involve a priori distinctions like primary and secondary labour market or the level of education. Hartog (1993), shows what problems these a priori categories lead to in the study of self-selection, which is a very relevant issue for the investigation of the distribution of capabilities over people and therefore important for the explanation of earnings differentials. Hartog therefore stresses the importance of investigating the actual labour market segments empirically. Such empirically observed segments will provide an insight into the competition structure of the labour market which is more complex than most theoretical structures, and will also allow for the possibility that the segmentation structure might change in time due to occupational changes or labour market circumstances.

The aim of this paper is to analyse the competition between graduates from different types of training on the labour market, using data from the Dutch Labour Force Survey of 1979 and 1985. Specific methods will be introduced to analyse the competition structure and the changes that have taken place in this structure between 1979 and 1985. We will show that the labour market is segmented along qualification lines. Within each segment only a few types of training compete with each other and some segments can even be called monopolistic in the sense that they are the exclusive domain of only one type of training.

The analysis will offer a detailed description of the substitution possibilities on the labour market, both for the supply and demand side. Besides its relevance for labour market

research, as indicated above, this is important information for individual demanders and suppliers of labour market and policy makers:

1. For individual demanders and suppliers of labour the substitution possibilities indicate the risks they take when following a particular training or offering a particular job.
2. For policy makers the analysis of the substitution processes on the labour market will show the potentials for flexibility in particular segments of the labour market for particular types of training. It also shows the effects of horizontal and vertical differentiation in education.

1. Selection and allocation on the labour market

Economic and sociological literature usually distinguishes at least three different functions of education:²

- a. The qualification function: following education makes people more productive in their future jobs.
- b. The selection function: education serves as a sorting machine where only those are selected who possess the required qualifications.
- c. The allocation function: education is an important determinant of the allocation of individuals to particular jobs on the labour market.

We take the position that the latter two functions can only be understood in conjunction with the qualification function, i.e. education can perform its selection and allocation function only because it has a qualification function.³

This qualification can take two different forms (Schultz, 1961; Becker, 1964):

1. General qualifications or generic human capital: this is associated with general cognitive development, learning behaviour, general social abilities etc.
2. Specific qualifications or specific human capital: this is associated with the specific skills which are needed for a particular job.

The distinction between generic and specific human capital parallels the vertical and horizontal differentiation in the educational system, where the amount of generic human capital is closely related to the number of years of education, while specific human capital is more closely linked with the sector of education. This identification of generic qualifications with the length of the training period is not trivial, but assumes a kind of optimal investment behaviour of students. Students who have more years of training will be those who possess more training capability (selection argument) or will also invest in generic human capital besides their specific training, since they will have more benefit from it.

It is the combination of generic and specific human capital that determines an individual's chances in the selection processes on the labour market. As Glebbeek (1983) points out, for large parts of the labour market – those sectors facing efficiency pressures – employers seek to minimise the expected training costs of their employees. Thus they rank applicants for a job according to their assessed training costs (Thurow, 1975). These training costs cannot directly be assessed, but are indicated by simple screening devices like education and age. Education probably serves as the most important screening device. According to Glebbeek, the expected training costs of graduates from a particular training are a function of three components:

1. learning ability: the average expected learning ability of the graduates of a given type of training (the amount of generic human capital);
2. exclusivity: the extent to which a type of training has an advantage in the exclusive supply of the required skills for a certain function (the amount of specific human capital);
3. incompetence risks: the extent to which the graduates vary in terms of their control of the required skills, in combination with the sensitivity of the function to this variation.

According to Glebbeek, the labour market position of a type of training is better when its exclusivity is high, the incompetence risk low, and the average learning ability is good. Conversely, the less advantage a type of training offers in the exclusive supply of the required skills, the more sensitive its labour market position will be to indications of the learning ability and quality variation of its graduates.

On the one hand, types of training differ in the ratio of generic versus specific human capital offered to their students as well as in the amount of quality control or selectivity of their curriculum. On the other hand, jobs differ in the amount of generic versus specific human capital required as well as the sensitivity of the job to incompetence of the job holder.

This implicates that ideally three types of segments in the labour market can be distinguished. In the first place, those segments where there is a strong emphasis on specific skills, which can only be acquired by specific training.⁴ This parallels what Lutz and Sengenberger (1974) have called the 'craft-specific' segment of the labour market. Technical jobs are a typical example of this type of segment. The specific skill requirements make it almost impossible to substitute between different types of training at the same level. For it is not training in general, but training in a specific subject that makes a person better qualified for these particular jobs. Substitution is therefore more likely to occur with similar types of training at the next higher or lower level. These segments are therefore determined by the sector of education, rather than the level of education.

The second type involves those segments where there is a strong emphasis on general skills. This is not to say that in performing the job, specific skills are not required. The required skills may be too firm-specific to be taught in regular training or – because of technological developments – there is uncertainty about the specific skills needed in the future. In both cases, the employer will tend to emphasize the general learning ability. As mentioned above, people with a high level of educational attainment will tend to possess (initially or due to training) more general learning capabilities. This selectivity is informative for employers and therefore screening (Spence, 1973; Stiglitz, 1975) becomes important and the level of education is judged as more relevant than the specific sector of education. Competition will therefore ideally be restricted to one level of education, involving multiple sectors of education. These types of training are only gradually different, with overlapping labour market segments.

The third type consists of segments where there is an exclusive relation between a type of training and an occupation. These are typically to be found in the professional segments of the labour market where interest groups or governments regulate the access to particular jobs by setting certain types of training requirements. These educational credentials (Collins, 1979) serve as an admission ticket to the jobs in question. As a rule (and often enforced by law) there are no substitution possibilities, either from other sectors of education or from other levels. Conversely, however, people with these types of training might find employment outside their protected segment. The situation is therefore not symmetric.

The specific constellation of substitution possibilities within a segment is thus an indication of the weight put on specific human capital or generic human capital. If substitution involves only one sector of education and multiple levels, then the emphasis in that particular segment is on specific human capital. If substitution involves multiple sectors within one level of education, this refers to segments where people are screened on generic human capital. Many authors believe that, as a result of technological developments and firm-specific requirements, this screening on the level of education has gained importance over the last two decades (Van Hoof, 1987). If there are no substitution possibilities, this refers to segments where access to jobs is ruled by credentials. With the ongoing specialization of the labour market, this type of segment will also have extended over the years.

The questions we address in this article are:

1. To what extent can the labour market meaningfully be described as segmented by educational qualifications?
2. Is there a trend towards a higher level of screening on the level of education and/or is there a trend towards credentialism?

2. Data and methodology

The data for this paper stem from the Dutch Labour Force Surveys of 1979 and 1985. These are national representative samples (approximately 2.5% of the population) selected by the Central Bureau of Statistics (CBS). From these two surveys a matrix of training by occupation is used. The educational background of the workers has been classified by the ROA-classification of education, which consists of 54 categories. The occupations have been classified according to the 3-digit CBS-classification, which is based on the International

Standard Classification of Occupations. The 3-digit classification entails 319 occupational titles (CBS, 1985).

This matrix education by occupation is used to investigate the competition structure of the Dutch labour market. A crucial assumption to justify this approach is that there is no distinction between the potential and the actual occupations of persons from a certain type of training. Theoretically, it might, however, be the case that the threat of people entering a certain educational background influences the labour market conditions in certain occupations, without people really entering these occupations. Furthermore, persons with a certain type of training might have other occupational possibilities, which are not attractive at the moment, but might become an important alternative when their labour market position becomes worse.

Based on the information about the actual employment of people from a certain type of training, the similarity between types of training can be measured. The actual analysis of this matrix cannot be carried out without some sort of data reduction. Factor analysis is chosen as a way to reduce the huge amount of information and to describe the underlying structure.

First a similarity matrix is produced in which the association between the different types of training is to be found. In this way the matrix 'training by occupation' is replaced by a matrix 'training by training'. Following Borghans (1992) the similarity between two types of training is defined as:

$$S_{i,ii} = \frac{\sum_j P_{ij} P_{ij}}{\sqrt{\sum_j P_{ij}^2 \sum_j P_{ij}^2}}$$

in which $S_{i,ii}$ = similarity between training i and training ii

P_{ij} = proportion of people with training i working in occupation j .

This criterion, often used in cluster analysis (Lorr, 1983), measures the cosine of the angle between two vectors of distribution. If the distribution of two types of training i and ii is equal, then the measure will be + 1. If the distributions of the two types of training do not match at all, i.e. if people from two different types of education never have the same occupation, the similarity will equal zero. This similarity measure is used to measure the association between all pairs of types of training, thus resulting in an association matrix of types of training. The resulting matrix can be proven to be positive definite.

Factor analysis is mostly used to describe the association between variables. However it can also be used to describe the association between objects (Kim, 1975). The similarity matrix is therefore analysed with factor analysis,⁵ to yield a clear view on the underlying structure of competition on the labour market. The factors can be viewed as representing different segments of the labour market. Such segments consist of one or more occupations, for which a particular group of types of training gives access. The segmentation of the labour market is thus defined by the qualification structure of the workers: if one or more types of training share the same occupations, this is expressed by a separate factor on which these particular types of training have high loadings, while other types of training have low loadings on this factor.

According to the segmentation literature, mobility takes place mainly within segments, but not between segments. Segments are viewed as relatively isolated, with strict boundaries between them. This calls for a factor analysis in which the extracted factors are independent, and as no prior information exists on the underlying structure, principal component analysis is chosen above classical factor analysis. In this way the extracted factors represent segments of the labour market in such a way that competition is allowed within but not between the segments.

The number of factors which can meaningfully be extracted indicates the degree of segmentation on the labour market. In the case of a perfect exclusive relation between a type of training and an occupation, there will be as many factors as there are types of training, each with an eigenvalue of 1.00. Of course, in reality a high degree of segmentation will produce eigenvalues smaller than 1.00, because even in a situation where access to an occupation is

strictly reserved for graduates of a particular training, there will always be graduates of this training who hold other occupations. In the case of total flexibility (i.e. all types of training share the same distribution of occupations), only one factor will be extracted with an eigenvalue of 54 (i.e. the total number of types of training distinguished).

The loading of a type of training on an extracted factor indicates the importance of that segment for the training in question. High loadings mean that the segment is important for the training. The loadings also show which types of training compete with each other in the segment and which types of training dominate the segment. The eigenvalue of the factor represents the amount of competition: the more types of training are dependent on the same segment, the higher the eigenvalue of the factor in question and the more competition in that segment exists. The total amount of competition on the labour market can likewise roughly be determined as:

$$C = V - \frac{n-1}{N} = \frac{1 + \sum_{\lambda_i > 1} (\lambda_i - 1)}{N}$$

in which

C = the amount of competition;

V = the proportion 'explained' variance⁶ with extracted factors with an eigenvalue greater than 1.00

λ_i = the eigenvalue of factor i.

n = the number of extracted factors with eigenvalue greater than 1.00

N = total number of types of training

This competition-measure depends on the sum of the extent to which the factors exceed the eigenvalue 1.00. If there are only a few segments in the market which include many types of education, the competition-measure will be large.

The aim of the factor analysis is purely descriptive. There is no theoretical premise on which the number of factors to be extracted can be based. As the interest is focussed more on a simplified reproduction of the competition structure (i.e. the factor structure), rather than in the assignment of a type of training to one particular factor, varimax rotation is chosen to obtain an optimal solution.

3. Analysis

Table 1 gives the results of the factor analysis for both the 1979 and the 1985 data. Usually, an eigenvalue greater than 1.00 is used to determine the number of extracted factors. As this criterion would lead us to underestimate the number of segments where an exclusive relation between training and occupation exists, the threshold has arbitrarily been set at .50. In this case, types of training where a large percentage of the graduates occupies a particular segment of the labour market with little competition from other types of training will be regarded as a separate segment. Of course, the lowering of the threshold also enlarges the chance of extracting factors which cannot be meaningfully interpreted.

Table 1. Results of the factor analysis for 1979 and 1985: general statistics

number of factors extracted* in 1979:	29	(17)
number of factors extracted* in 1985:	29	(16)
cumulative explained variance** with extracted factors in 1979:	92.4%	(74.4%)
cumulative explained variance** with extracted factors in 1985:	92.2%	(72.9%)
Range communality in 1979:	.78 - 1.00	
Range communality in 1985:	.70 - 1.00	

* between brackets number of factors with an eigenvalue > 1.00

** between brackets cumulative explained variance for factors with an eigenvalue > 1.00

Both analyses extracted 29 factors. In the 1979 analysis, 17 of these factors have an eigenvalue greater than 1.00, corresponding to 74.4% of the variance. In the 1985 analysis, these numbers are 16 and 72.9% respectively. Following our definition stated in section 3, the total amount of competition on the labour market has thus remained the same. In 1979 the amount of competition was $(0.744 - 17/54) \times 100\% = 43\%$. In 1985 the corresponding figure was $(0.729 - 16/54) \times 100\% = 43\%$. This indicates that there is considerable openness on the labour market and that in general there is no exclusive relation between a type of training and an occupation. There is however a considerable degree of segmentation, but these segments usually involve more than one type of training as will be shown later. The degree of segmentation remained the same over the 1979-1985 period.

The commonalities of the different types of training range from .78 to 1.00 in the 1979 analysis, and from .70 to 1.00 in the 1985 analysis. This means that the distributions of all types of training is reasonably, and sometimes even very well, described by the extracted factors. This is mainly due to the low threshold of .50. If the threshold was set at 1.00, one out of seven types of training would have had commonalities lower than .50. As we shall see later, these particular types of training all have an exclusive occupational domain.

Not all extracted factors could be meaningfully interpreted. In the 1979 analysis, two factors referred to educational rest-categories, while one factor had no significant loading of any training. In the 1985 analysis, again two factors referred to educational rest-categories, while two factors had no significant loadings of any training. Tables 2 till 25 present the extracted factors that could be interpreted. The factors are presented in descending order of the eigenvalues in the 1979 analysis. The factor structure between the two years is quite similar. In a few cases, however, the 1979 analysis yielded two factors, where the 1985 analysis yielded one factor and vice versa. This is indicated in the tables. As a general rule, all types of training are presented which have loadings higher than .30.

The largest segment to be distinguished are the economic administrative occupations (appendix, table 2). It is the main segment for the general secondary education (lower and higher level), the commerce and administration types of training in lower (LVE), intermediate (IVE) and higher vocational education (HVE), as well as for the administrative legal and fiscal types of training at the intermediate and (only for 1985) the higher vocational level. It is striking that the types of training in this segment vary from lower vocational level to higher vocational level. This is probably partly an artefact of the classification. The CBS-classification is not very elaborate for administrative occupations: e.g. management secretaries and typists belong to the same 3-digit occupational category, although they quite clearly differ in qualification requirements. Nevertheless, it seems to be a segment where the boundaries between sectors of education are not very clear: there is a huge amount of competition between general types of training, commerce and administration types of training.⁷ This indicates a segment where emphasis is placed on generic rather than specific human capital. Furthermore, the competition between the different levels indicates that there is a great overlap in occupations held by people with a different level of educational attainment. This may indicate processes of displacement and under-utilisation. The fact that the loading of HVE Administrative, Legal and Fiscal grows from .32 in 1979 to .63 in 1985, points in the same direction: as general unemployment rates rise from 6.5% in 1979 to 15.8% in 1985, the job requirements set by employers seem to get higher.

The second largest segment is formed by the teaching professions (appendix, table 3). In the 1979 analysis, separate factors are extracted for HVE Teacher Training (mainly consisting of teachers in primary education) and the academic types of training (mainly teachers in secondary and tertiary education). In the 1985 analysis only one factor is extracted. This is due to the growing number of graduates with HVE Teacher Training who become teacher in secondary education. Surprising is the strong position in this segment for the academic education (AE) in Arts and especially mathematics and natural sciences. This indicates the importance of teaching professions for these types of training. Although this segment seems to emphasise generic human capital (competition within one level between different sectors of schooling), this is an artefact of the classification: all teaching professions in secondary and tertiary education fall into one occupational category. Of course, there is no real competition between e.g. a teacher of mathematics and a teacher of history. In fact, this segment is a good example of credentialism: access to jobs is limited to those who have the proper training certificates. In this way the segment of teaching professions is in itself again highly segmented⁸.

The competition structure in the segment for occupations in non-medical laboratories (appendix, table 4) is clearly an example of a craft-specific labour market. The segment is open

to those who are trained for technical, biological and chemical laboratory functions at an intermediate and higher vocational level.

The same holds true for the segment of the lower and intermediate agricultural occupations (appendix, table 5). This segment is dominated by LVE Agriculture and IVE Agriculture. Interesting here is the position of HVE Agriculture. Although the main segment for this training is formed by the higher agricultural occupations (appendix, table 18), it also competes with the lower and intermediate types of training in this segment.

The segment of theological professions clearly indicates a craft-specific labour market (appendix, table 6). The segment is completely dominated by the theology types of training at the higher vocational and academic level.

The engineering occupations can be divided into two different segments (appendix, tables 7 and 8): the occupations in which higher vocational and academic types of training in engineering dominate and the occupations in which the lower and intermediate types of training dominate. Interesting in the first segment is the position of HVE Business Administration Technology. The main segment for this training is the segment of business administration (appendix, table 19). The loading of this training in 1985 may well reflect changing characteristics of the higher engineering functions: less production and more management. The competition structure in 1979 clearly indicates a craft-specific labour market, with substitution possibilities limited to one sector of education. With regard to the structure in 1985, one could say that the boundary between engineering and business administration is becoming less sharp, thus introducing more competition with other types of training. The loadings of primary education in the lower and intermediate engineering segment indicates that some occupations in this segment are unskilled labour.

One can find the same phenomenon in the segments of lower community care and lower transport (appendix, tables 9 and 10). These segments show, in general, more competition between types of training. Although they are dominated by LVE and (to a lesser extent) IVE types of training in community care and transport respectively, there is also competition from other types of training, mainly from primary education and other LVE types of training. This shows that in the lower segments of the labour market, specific training certificates are not always required to enter a job. The segment of lower transport shows an increase in the qualification requirements, which is indicated by a higher loading of IVE Transport, Harbour and Telecommunications in 1985 and a lower loading of Primary Education. In the segment of lower community care, the opposite seems to be the case. Here we see a lower loading in 1985 of IVE Community Care and a higher loading of Primary Education.

The segment of social and cultural occupations (appendix, table 11) is again an example of a craft-specific labour market with substitution possibilities limited to one sector. The fact that AE Social and Cultural shows an increase of loading between 1979 and 1985 seems to indicate processes of displacement and filtering down the labour market.

The segment of occupations related to fine arts and social sciences (appendix, table 12) is the first segment where competition is restricted to one level and involves multiple sectors of education. It refers to more general occupations on an academic level.

The segments for police and defence, nursing and paramedical occupations, law and administration and higher transport (appendix, tables 13 till 16) show very similar characteristics. Within each of these segments two types of training occur, both belonging to the same sector of education. In the case of law and administration, the segment is dominated by the academic training over its higher vocational counterpart. In the case of higher transport, the higher vocational training dominates over its intermediate counterpart. In the other two segments the loadings of the two types of intermediate and higher vocational education are similar. The competition structure in all four segments seems to indicate a labour market where emphasis is put on specific skill requirements. The decreases in the loadings of the HVE and IVE training in the segments of law and administration and higher transport respectively, indicates that during the 80's higher requirements were set by employers.

The segment for hotel and catering (appendix, table 17) presents an interesting case. In the 1979 analysis only one segment is distinguished in which hotel and catering types of training at intermediate and higher vocational level dominate. In the 1985 analysis, two different segments are distinguished, one for the training at intermediate level and one for the training at higher vocational level. This indicates a polarization in this segment of the labour market.

The segment for higher agricultural occupations (appendix, table 18) is dominated by the higher vocational and academic agricultural studies. One interesting fact is that the segment has become more important for both types of training, as is reflected in the higher loadings in 1985. As mentioned above, the HVE Agriculture also loads on the segment of lower and intermediate agricultural occupations.

The segment of business administration (appendix, table 19) used to be a segment dominated by AE Economics and Business Administration, with only limited competition from the HVE Commerce and Administration. A separate segment was formed by the HVE Business Administration Technology. In 1985, however, only one segment is distinguished. HVE Business Administration Technology has therefore managed to break open two relatively distinct segments of the labour market: the segment of higher engineering and the segment of business administration. It illustrates the fact that relatively new types of training can successfully operate on the labour market, even within existing segments.

The segment of performers and artists (appendix, table 20) is dominated by the HVE Fine Arts, with only limited competition from AE Fine Arts. The competition from the latter stems from the academically trained restorers, who are coded in the same occupation as artists. This segment shows the features of a craft-specific labour market segment.

The remaining segments of higher medical laboratory, intermediate medical laboratory, medical professions, pharmacy and lower security (appendix, tables 21 till 25) represent labour market segments ruled by credentials. Access to these jobs belonging is only open to people who hold the proper credentials.

4. Conclusions

In this paper the competition structure of types of training on the labour market is examined, using data from the Dutch Labour Force Survey of 1979 and 1985. In examining this competition structure, an attempt is made to grasp one of the essential elements of the labour market position of types of training: that is, the positioning of a type of training with regard to other types of training. Notably, this is rarely done in labour market research. Usually, the labour market position of a type of training is investigated by looking at indicators like unemployment rate, mean income or mean function level, for each training separately. On a labour market where competition and substitution takes place, these indicators can, however, not be understood as results of the supply and demand for that particular training, but arise in the interaction with the supply of related types of training and the demand for related occupations. One can even state that in this respect, previous research, implicitly, holds naive conceptions of the relation between education and labour market, assuming either full competition or an exclusive relation.

Competition is the essence of selection processes on the labour market and it is this process which has typically been neglected in previous research. The basic questions in this respect are: who competes with whom and for which job? In examining this competition structure, some specific methods to analyse the substitution possibilities between types of training have been introduced. The basic idea is that these substitution possibilities can be derived from the similarity of the distributions of the types of training over the different occupations. Factor analysis is used to reduce the amount of information and to identify the underlying structure.

Ideally, three types of segments are anticipated. The first type involves those segments where the emphasis is put on specific rather than generic skills. The substitution possibilities in these segments are restricted to one sector of education, but involve multiple levels. The second type involves the segments where people are screened on their general abilities rather than their specific skills. The level of education is therefore dominant, but within this level substitution may take place between different sectors of education. The third type involves the segments ruled by credentialism. Here an exclusive relation between a type of training and an occupation exists and, as a rule, there are no substitution possibilities.

The analysis shows that there is a considerable degree of substitution or competition on the labour market. A rough indicator of the degree of competition amounts to some 40%. This indicates that neither the assumption of an exclusive relation between training and occupation (which would yield a score of 0%) nor the assumption of total flexibility (which would yield a score of 100% competition), can be called realistic. The truth is somewhere in between. There

is a high degree of segmentation of the labour market along qualification lines and competition is mainly restricted to substitution within these segments.

Most of the segments to be distinguished belong to what has been referred to above as the craft-specific labour markets and the segments ruled by credentials. The majority of types of training (25 out of 54) belong to one of the twelve craft-specific segments. These typically involve two or three types of training at intermediate or higher vocational level that belong to the same sector of education (such as engineering, agriculture, transport etc.). Ten types of training can be said to have an exclusive position on the labour market. These types of training aim at the professional segments of the labour market and involve occupations such as teachers, medical and pharmaceutical professions, and security.

At the lower level of the labour market three different segments are distinguished: technical, community care and transport. All three segments involve both semi-skilled as well as unskilled occupations. Substitution takes place between lower vocational types of training and primary education.

Finally, a large segment of economic administrative occupations has been distinguished. This segment involves seven types of training from multiple sectors as well as multiple levels. It is a typical example of a sector where much emphasis is placed on general skills, and where the boundaries between the different occupations are not very clear. This causes a great deal of competition between the different types of training.

The occurrence of craft-specific segments and the absence of segments where there is competition between multiple sectors, but within one level, has to be explained further. One possible problem that makes it difficult to distinguish the general segments is the nature of the data used. The labour force census contains people from the complete labour force from all cohorts. The selection based on screening, which might particularly be expected in the general segments, might, however, change over the years. The present data therefore contain a mix of different screening strategies instead of one clearly observable screening rule. It might therefore be interesting to perform these analyses with data specific to a single cohort of school-leavers.

Furthermore, the analysis in this paper is, to a large extent, purely descriptive. In future research we will address, to enable a solid understanding of the selection processes, both the measurement techniques and the theoretical underpinning of the substitution process which take place at the labour market. Furthermore, we will address other aspects of the labour market position such as unemployment rate, or mean income. In conjunction with the present analysis on the competition structure, these indicators will show which types of training belong to the 'winners' or 'losers' within a particular segment of the labour market.

For an adequate investigation of these substitution processes at the labour market it is, however, a prerequisite to possess a description of the segments at the market. This article provides a way to observe these segments and has shown that it is indeed relevant to distinguish such labour market segments.

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Notes

- 1 A preliminary version of this paper has been presented at the 1992 meeting of the ISA Research committee on Social Stratification and Mobility in Trento, Italy. The authors like to thank Andries de Grip for his useful comments, and Jose le for computational assistance.
- 2 Some sociologists point out that education also serves a fourth function: the legitimating function in reproducing social inequality.
- 3 This is not without debate. Thurow (1975) e.g. takes the position that education has a screening function, without actually qualifying people for their jobs. Apart from unskilled labour, this proposition can hardly be called realistic. If education really does not improve students' qualifications, with regard to its length, it would be an extremely inefficient way to select or allocate people.
- 4 It is important to note that in economic and sociological research very little attention has been paid to the role of the specific sector of education. The main stream of research has concentrated on the effects of years of education or level of educational attainment on variables like income (Hartog et al, 1985), occupational status (Ganzeboom and De Graaf, 1989) or unemployment (Meesters and Van de Pol, 1988), while neglecting the effects of sector of education. However the sector of education may well overshadow the effect of the number of years of education as Glebbeek and Mensen (1986) and Bakker (1987) have shown. In the manpower forecasting literature, however, the sector of education plays a crucial role (Blaug, 1967, Van Eijs, 1993).
- 5 Although factor analysis is intended to analyse correlation matrices, we will use it here to analyse the similarity matrix. As stated above, the similarity matrix can be proven to be positive definite, which is a main prerequisite for factor analysis. The similarity-index has the property that the principal component factor analysis explains a maximum amount of the Gini-Hirschman-dispersion of a type of education instead of the variance of its frequency in every occupation.
- 6 As the analysis is done on a similarity matrix instead of a correlation matrix, in fact the factors explain the Gini-Hirschman-dispersion of a type of education over the occupations, rather than its variance. For convenience, however, the term variance will be used throughout this paper.
- 7 The position of IVE Transport, Harbour & Telecommunications refers to the administrative training in this type of education. As the educational rest-categories may vary between the years, their loadings will not be separately discussed.
- 8 In Borghans (1992), this classification problem for teaching professions is solved by the introduction of a different teaching profession for every type of education. This solution, however, reintroduces a priori segmentation at the labour market without empirical validation.

Appendix

Table 2. Economic-administrative occupations (factorloadings and eigenvalue)

Training	1979 factor 1	1985 factor 2
Lower General Secondary Education	.91	.87
Higher General Secondary Education	.91	.94
LVE Commerce and Administration	.86	.90
IVE Commerce and Administration	.93	.93
HVE Commerce and Administration	.70	.70
IVE Administrative, Legal and Fiscal	.70	.79
HVE Administrative, Legal and Fiscal	.32*	.63
LVE Community Care, Hotel and Catering	.36*	.29*
IVE Transport, Harbour and Telecommunications	.44*	.33*
HVE Interpreter and Translator	.29*	.35*
HVE Business Administration Technology	.17*	.34*
HVE Rest	.37*	.83*
Rest	.59	.07*
eigenvalue	9.94	10.29
pct. of var.	18.04	19.1

* not main factor for training in question

Table 3. Teaching professions (factorloadings and eigenvalue)

Training	1979 factor 2	1979 factor 28	1985 factor 2
HVE Interpreter and Translator	.86	-.05*	.70
HVE Teacher Training	.44*	.87	.83
AE Teacher Training	.89	.21*	.96
AE Arts	.97	.06*	.97
AE Mathematics and Natural Sciences	.86	.07*	.85
AE Agriculture	.42*	.04*	.31*
AE Engineering	.24*	.02*	.41*
AE Economics and Business Administration	.22*	.03*	.37*
AE Fine Arts	.09*	.07*	.37*
AE Social Sciences	.29*	-.01*	.44*
AE Rest	.51	.23*	.87
eigenvalue:	4.90	.64	5.32
pct. of var.:	9.1	1.2	9.9

* not main factor for training in question

Table 4. Non-medical laboratory (factorloadings and eigenvalue)

Training	1979 factor 3	1985 factor 5
IVE Non-medical laboratory	.96	.97
HVE Non-medical laboratory	.97	.95
HVE Rest	.76	.22 *
eigenvalue:	2.75	2.19
pct. of var.:	5.1	4.1

* not main factor for training in question

Table 5. Lower and intermediate agricultural occupations (factorloadings and eigenvalue)

Training	1979 factor 4	1985 factor 4
LVE Agriculture	.98	.99
IVE Agriculture	.98	.98
HVE Agriculture	.52*	.45 *
eigenvalue:	2.54	2.50
pct. of var.:	4.7	4.6

* not main factor for training in question

Table 6. Theological professions (factorloadings and eigenvalue)

Training	1979 factor 5	1985 factor 6
HVE Theology	.99	.99
AE Theology	.99	.99
eigenvalue:	2.08	2.05
pct. of var.:	3.9	3.8

Table 7. Higher engineering (factorloadings and eigenvalue)

Training	1979 factor 6	1985 factor 7
HVE Engineering	.93	.91
AE Engineering	.92	.84
HVE Business Administration Technology	.04*	.43*
eigenvalue:	1.99	1.92
pct. of var.:	3.7	3.6

* not main factor for training in question

Table 8. Lower and intermediate engineering (factorloadings and eigenvalue)

Training	1979 factor 7	1985 factor 9
LVE Technical	.84	.84
IVE Engineering	.92	.90
Primary education	.37*	.34*
eigenvalue:	1.93	1.64
pct. of var.:	3.6	3.0
* not main factor for training in question		

Table 9. Lower community care (factorloadings and eigenvalue)

Training	1979 factor 8	1985 factor 3
LVE Community Care, Hotel and Catering	.84	.89
IVE Community Care	.80	.67
Primary education	.43 *	.72
Lower General Secondary Education	.23*	.40*
LVE Commerce and Administration	.25 *	.33*
LVE Rest	.23 *	.73
eigenvalue:	1.88	3.02
pct. of var.:	3.5	5.6
* not main factor for training in question		

Table 10. Lower transport (factorloadings and eigenvalue)

Training	1979 factor 9	1985 factor 13
LVE Transport and Harbour	.93	.94
IVE Transport, Harbour and Telecommunications	.27 *	.52 *
Primary education	.63	.38 *
LVE Technical	.40*	.32*
Rest	.59 *	.04 *
eigenvalue:	1.68	1.18
pct. of var.:	3.1	2.2
* not main factor for training in question		

Table 11. Social and cultural (factorloadings and eigenvalue)

Training	1979 factor 10	1985 factor 8
IVE Social and cultural	.91	.85
HVE Social and cultural	.96	.94
AE Social and cultural	.15*	.38 *
eigenvalue:	1.55	1.86
pct. of var.:	2.9	3.4
* not main factor for training in question		

Table 12. Fine arts and social science (factorloadings and eigenvalue)

Training	1979 factor 11	1985 factor 17
AE fine arts	.86	.81
AE Social and cultural	.88	.57
AE Rest	.48*	.07 *
eigenvalue:	1.46	.99
pct. of var.:	2.7	1.8
* not main factor for training in question		

Table 13. Police and defence (factorloadings and eigenvalue)

Training	1979 factor 12	1985 factor 12
IVE Police, fire and defence forces	.89	.87
HVE Police, fire and defence forces	.89	.87
eigenvalue:	1.40	1.21
pct. of var.:	2.6	2.2

Table 14. Nursing and paramedical (factorloadings and eigenvalue)

Training	1979 factor 13	1985 factor 10
IVE Paramedical services	.87	.90
HVE Nursing and Physiotherapy etc.	.87	.93
eigenvalue:	1.38	1.54
pct. of var.:	2.6	2.9

Table 15. Law and administration (factorloadings and eigenvalue)

Training	1979 factor 14	1985 factor 16
AE Law and Public Administratio	.94	.96
HVE Administrative, legal and fiscal	.75	.44*
eigenvalue:	1.29	1.00
pct. of var.:	2.4	1.9
* not main factor for training in question		

Table 16. Higher Transport (factorloadings and eigenvalue)

Training	1979 factor 15	1985 factor 14
IVE Transport, Harbour and Telecommunications	.75	.67
HVE Air, Sea and Land transport	.91	.94
eigenvalue:	1.28	1.12
pct. of var.:	2.4	2.1

Table 17. Hotel and Catering (factorloadings and eigenvalue)

Training	1979 factor 16	1985 factor 18	factor 20
IVE Hotel, Catering and Hairdressing	.88	.97	.12 *
HVE Hotel and Catering Industry	.80	.12	.95
eigenvalue:	1.07	.98	.96
pct. of var.:	2.0	1.8	1.8
* not main factor for training in question			

Table 18. Higher agricultural occupations (factorloadings and eigenvalue)

Training	1979 factor 17	1985 factor 11
HVE Agriculture	.71	.81
AE Agriculture	.87	.90
eigenvalue:	1.07	1.43
pct. of var.:	1.9	2.6

Table 19. Business administration (factorloadings and eigenvalue)

Training	1979 factor 18	factor 21	1985 factor 15
AE Economics and Business Administration	.93	.07*	.77
HVE Business Administration Technology	.07*	.96	.65
HVE Commerce and Administration	.34*	.07 *	.28*
eigenvalue:	.99	.93	1.08
pct. of var.:	1.8	1.7	2.0
* not main factor for training in question			

Table 20. Performers and artists (factorloadings and eigenvalue)

Training	1979 factor 19	1985 factor 23
HVE Fine arts	.96	.95
AE Fine arts	.36*	.25
eigenvalue:	.96	.82
pct. of var.:	1.8	1.5
* not main factor for training in question		

Table 21. Higher medical laboratory (factorloadings and eigenvalue)

Training	1979 factor 20	1985 factor 19
HVE Medical laboratory	.96	.96
eigenvalue:	.94	.97
pct. of var.:	1.7	1.8

Table 22. Medical professions (factorloadings and eigenvalue)

Training	1979 factor 22	1985 factor 22
AE Veterinary and Medical Sciences and Dentistry	.98	.99
eigenvalue:	.89	.90
pct. of var.:	1.6	1.7

Table 23. Lower Security (factorloadings and eigenvalue)

Training	1979 factor 23	1985 factor 21
LVE Security	.99	.99
eigenvalue:	.87	.94
pct. of var.:	1.6	1.7

Table 24. Pharmacy (factorloadings and eigenvalue)

Training	1979 factor 24	1985 factor 26
AE Pharmacy	.99	.97
eigenvalue:	.80	.68
pct. of var.:	1.5	1.3

Table 25. Intermediate medical laboratory (factorloadings and eigenvalue)

Training	1979 factor 25	1985 factor 25
IVE Medical Laboratory	.99	.99
eigenvalue:	.76	.71
pct. of var.:	1.4	1.3

Session 5

Labour market itineraries of higher education graduates

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Summary report

Three of the four articles presented within the scope of this Colloquium deal with the labour market for graduates of universities and other institutions of higher learning. In Belgium, Alaluf and Vanheerswyngels have studied entry to training and occupational integration of graduates in the paramedical and social sector. The article by Masjuan, Zaldivar, Vivas and Troiano (Catalonia) discusses the situation of graduates in specific university disciplines (economics, law, psychology, information sciences, chemistry). The article by Arnesen, Baekken and Naess (Norway) gives an overall view of the situation of higher education graduates. In her latest article, Lea Battistoni (Italy) looks at the influence of social origin on entry to university, academic success and entry on the labour market for university graduates in law, humanities and engineering.

Three of these articles (Belgium, Catalonia and Italy) describe graduates who left higher education around 1988-1989¹ and were surveyed three years later (1991-1992). The fourth (Norway) is based on surveys which have been carried out 6 months after graduation since the beginning of the 1970s.

The labour market context in which these articles were written

In the course of the last twenty years, the relationship between the growth in flows of higher education graduates and in recruitment activity for positions in engineering, management or intermediate professions has undergone profound changes.

Today, there is a greater deal of material available on this issue, this data constitutes a resource for our network² and a basis for the consideration of issues raised by the expansion of higher education during the 1990s.

In France, up to the beginning of the 1980s, annual recruitment of young people for positions in engineering, management or in intermediate professions was higher than the numbers of graduates in higher education. The two flows gradually evened out in the early 1980s. The strong movement towards higher education in France has now created an imbalance in the opposite direction, a tendency which has been prevalent since the end of the 1980s³.

This evolution of the relationship between supply and demand of graduates has led to a change in the conditions affecting occupational integration and subsequent job mobility. In the first phase described, graduates were eagerly assimilated by the labour market and socio-professional mobility was particularly high, including among graduates with somewhat lower qualifications. During the second period, graduates could still find easy entry onto the labour market but tensions started appearing in socio-professional mobility for persons in certain areas (technicians). And in more recent times, competition between categories of graduates in terms of access to employment has intensified. In a trend little noticed between 1988 and 1991 as a result of the strong economic upswing at the time, conditions affecting occupational integration for graduates have been deteriorating rapidly since 1992. The situation in Norway seems to be comparable to what is happening in France. Spain and Italy are currently at the beginning of a phase of strong expansion in higher education.

The relevance of these articles

The articles under consideration shed light on the mechanisms at work on the labour market for higher education graduates and on the impact of government policies on expansion of the workforce. The Norwegian and the Catalan articles insist on the positive influence of higher education on the occupational situation of adult graduates and first job seekers throughout the 1980s. This is a situation common to all European countries. Unemployment among higher education graduates follows, but at a clear distance, the trend of unemployment in the overall working population. There are, of course, disparities according to areas of specialization and degrees obtained. During the 1980s, the Norwegian government opted to develop regionally based training and to favour certain disciplines (law and economics). Each European country made similar choices, which then guaranteed good conditions of occupational integration for a growing number of graduates. The Norwegian article addresses the problem of limiting such policies in view of the very rapid growth of higher education in the early 1990s.

It seems evident that Italy and Spain will soon be faced with the same situation. France is already feeling the pinch. The employment crisis throughout Europe reveals the weaknesses in higher education and the areas where competition is more or less intense between the various categories of young graduates.

The Italian article sheds light on the interesting role of social origins and the effect ascribed to various university disciplines on conditions of occupational integration. In the current situation of the Italian higher education system, which is characterized by a high failure rate for students in long university courses, young people coming from disadvantaged backgrounds are heavily penalized in specialization areas viewed as important by higher social classes. Disadvantaged students are a minority in these fields, their failure rate is very high and the conditions affecting their occupational integration are disastrous. The opposite applies to fields related to engineering, where the social composition of the groups is better balanced and success rates and conditions of access to the labour market and job stability are much better for all graduates irrespective of their social origin.

The need to study job recruitment mechanisms and not only entry into working life

At this stage, it would seem useful to investigate the competition between young people and adults in terms of access to employment and thus on a broader base to examine the recruitment policies prevalent in the overall production system of each country. These issues were still premature in the articles which have been presented here. In the future, however, it will be impossible to avoid dealing with this type of question in order to understand the diverse forms of mobility among young people in their first few years of working life. In order to tackle these issues, we must ensure that the longitudinal studies now being launched become, as rapidly as possible, *representative of the flow of higher education graduates irrespective of the type of degree (and including drop-outs) and field of specialization*. This is an indispensable condition to study the mechanisms of how jobs are given and to understand the competition between graduates and thus to get an adequate picture of the various labour markets.

The need to explain divergences in conditions affecting occupational integration

The articles underscore the traditional differentiation factors of conditions affecting occupational integration: sex, degree, field of specialization (law or commercial disciplines are more favourable than humanities, and engineering sciences are always a separate area altogether), better results in institutions with a higher degree of recognition (university vs college in Norway) etc.

Nowadays, examining the evolution of these divergences tells us a great deal on the operation of the labour market for graduates of higher education. This is exactly what the Norwegian authors have done. Over a given period of time, the divergences between boys and girls, with or without a degree, from a college or university, etc. become more or less significant depending on the economic situation in a given sector. But little is known on the other factors

influencing these divergences. Why are they very high and sensitive to the economic situation between boys and girls in chemistry or biology, but much less so in the field of information science?

The value of longitudinal studies

The value of longitudinal studies is highlighted in the Italian article which studies the impact of social origin on young people's vocational routes. Young people coming from more privileged backgrounds follow vocational routes with direct access to employment leading to stable jobs, while the routes followed by other young people are characterized by alternating periods of work and unemployment. This oscillation between employment-unemployment is greater than the bare unemployment rate figure quoted in the study would lead to suppose.

Viewed on its own, the unemployment rate for young people three years after leaving higher education is not adequate information on the nature of the difficulties they face. What is salient in the study is the difficulty of a young Italian of modest social origins to find access to stable employment. These young people tend to get only unstable employment alternating with periods of unemployment. They are simply not competing on the same labour market.

The need for monographs on particular population groups

The Belgian article deals with one very particular labour market: the paramedical and social professions. In all countries, this market has its own rules, characterized by state-regulated growth and restricted admission to university training. This market was highly favourable in Belgium at the time investigated by the authors, so that graduates had rapid access to their first jobs and the unemployment rate remained very low several years later. Nevertheless, a considerable number of first jobs are unstable in nature (nearly half), and many students continue their studies beyond the first degree, thus postponing their entry on the labour market. Stabilization does not occur until several years later. In such a situation, a longitudinal analysis allows researchers to follow movements between jobs and to study their causes. In the case at hand, movement between jobs does not seem to be mainly due to the unstable nature of jobs, but rather to the quality of the jobs held or the opinion job holders have of their job. The authors believe that the causes for this situation can be found in the history of the health professions and the image of these professions.

What period should studies cover?

The length of an investigation (six months or up to three years) is a major methodological element in the analysis of conditions affecting access to employment among graduates. In a context where young people have a rapid access to the labour market (as is frequently the case in Anglo-Saxon countries, and as was the case in France in the 1970s), it is clear that a study carried out a few months after the subjects have left the education system is sufficient to provide information on the quality of occupational integration for young people (cf. the Norwegian article). On the other hand, in a context characterized by a high level of selectiveness on the labour market for young people (the case of the Latin countries: France, Spain, Italy), the time needed for occupational integration is considerably longer. Investigations should then be run one or several years after subjects have left the education system. The employment-unemployment alternance and the difficulties involved in finding stable employment stretch over many years with widely differing forms according to the type of degree concerned and the field of specialization (cf. the Italian article).

The indicators used

The purpose of longitudinal studies is the study of the conditions affecting access to employment and the quality or nature of jobs held in relation to the training which preceded employment.

Of major concern to all countries are the conditions affecting young people's entry into working life. The various forms of job mobility (new functions, changing companies, geographic mobility) are not included here. They do not play a significant role until long-term studies of career routes are undertaken. Such investigations, however, are very infrequent at the present time. In contrast to empirical and theoretical research on social mobility, little is known about, for instance, the forms of occupational mobility in the first 10 to 15 years of working life.

The indicators used in the four articles under consideration are part of the traditional arsenal of indicators used in studies on the occupational integration of young people.

The first group of indicators on work and unemployment offers the greatest degree of ease for an international comparative study. This does not exclude difficulties involved in defining the concept of work or particularly of unemployment in the various countries. In particular, factors such as the emergence of small jobs ("petits boulots") or the growth of part-time employment blur the margins between work and unemployment. But this is a difficulty shared by all researchers or politicians in Europe today. It is not unique for us.

The second group of indicators raises more problems involving the determination of concepts and their definition and extent. What is meant by work in accordance with training, or by jobs where the level of employment matches the level of training (Norwegian and Spanish articles).

There are two traditions in this area. The Anglo-Saxon tradition bases the comparison between training and employment on the statements of the individuals concerned. The subjects themselves say whether they believe their job corresponds to the training they had. This indicator is not much used in the French tradition. French papers on categories of training and employment prepared in connection with planning work done in the 1950s and 1960s led to a more normative study of the relationship between training and employment.

It would be advisable to investigate the advantages and limitations of each method if we intend to use this type of indicator in the studies carried out by our network.

Conclusions: a few guidelines for 1994

In order to analyze the mechanisms operating on the labour market, three lines of investigation could be followed within the framework of our network.

- New research projects or reviews of existing work on the flows of recruitment according to economic activity sector or to employment group of young people and adults according to their degrees and areas of specialization. This would necessitate studies on the working population (workforce studies, where the occupational situation of a representative sample of the population is known at two dates at least two years apart).
- Work on the development in the divergences in conditions of occupational integration according to traditional individual characteristics. This would necessitate the repetition of longitudinal studies in time on identical population groups (every 3 or 4 years would seem to be a satisfactory compromise between cost constraints and quality of information).
- A synthesis of more monographic research on specific population groups (such as the paramedical professions in Belgium) could lead to explanatory patterns at divergence with classical theories.

Notes

1 Two groups (1985 and 1988) are dealt with in the article by Alaluf and Vanheerswyngels.

2 "From upper education to employment", OECD Paris 1992, Volumes I to IV.

3 A. Chariot and F. Pottier in OECD op. cit. Volume IV.

"How does a changing labour market affect the transition from higher education to work?"

Introduction

The Norwegian labour market has gone through major changes during the 1980's. Until 1980, unemployment in Norway was at a low level in an international perspective (between 2 and 3 per cent of the labour force). After a period with slightly increasing unemployment in the beginning of the eighties, there was a marked increase in the demand for labour during the period from 1984 to 1986, which resulted in the unemployment level dropping back to the same low and stable level as previously. This was then followed by a period with a continuing decline in the demand for labour and increasing unemployment. In 1992 the unemployment rate had reached 6 per cent, and with that the unemployment rate in Norway is about to reach the average rate of the OECD countries. In this paper we will discuss how the turbulent situation on the labour market during the 80s has affected the transition from higher education to the labour market during this period. Changes in supply and demand for labour in general will provide an important framework for the analysis of the transitions.

1. Changes in the demand for labour

The Norwegian economy experienced continuing growth from the second world war up to the 1980's, and unemployment was low. This situation changed dramatically during the 80s. In the first half of the 1980's there was a temporary increase in the number of unemployed. This unemployment was caused by economic cycles, where primarily the manufacturing industries suffered increasing problems. As an industrial group, the manufacturing industry employs a relatively small percentage of higher educated manpower. One would therefore expect that the graduate labour force would not be very affected by increasing unemployment. The slump was followed by a period with exceptionally high demand. The liberalisation of the credit market in the middle of the 80s led to a strong growth in loans which again made possible increased private consumption. The strong growth in demand led to an increase in investments in protected groups of industry, at the same time as the competitive power of groups of industry stagnated, and a gap between consumption and production emerged. Major adjustments of economic policies were made to improve the situation. Fiscal constraints were undertaken and at the turn of the year 87/88 a dramatic increase in unemployment and a decline in employment took place. The problems on the labour market from 1988 could be said mainly to have their background in structural circumstances in the Norwegian economy, and the unemployment can, therefore, be described as structural unemployment.

The economic crisis that started in 1988 had different consequences for different groups of industry. Surplus capacity in the protected groups of industry and a crisis of capital both in the private sector and households hit banks and financial institutions especially hard. Traditional trades, building and construction work also had problems to some extent. These are groups of industry which to a greater extent than e.g. manufacturing industry employ higher educated labour, and the problems will therefore have consequences for the demand for certain groups of graduate manpower. Problems on the labour market for graduates will depend on circumstances on the supply side, i.e. the supply of higher educated graduates. These circumstances will be discussed in a later section. The next section deals with the system of higher education in Norway.

2. The system of higher education in Norway

Norway has two sectors of higher education; the university sector, consisting of four universities and eight specialized institutions in fields like business administration, agriculture, veterinary medicine, architecture, music, etc., and the non-university or college sector, made up of regional colleges and colleges specializing in a particular field, e.g. nursing, social work, teacher training and engineering.

The regional colleges were established as new institutions during the 70s and 80s, while the rest of the institutions in the college sector (teacher training colleges, nursing colleges, colleges of engineering, etc.) are typically older and specialized colleges upgraded to higher education institutions after 1970.

University programmes in the professions (theology, law, medicine, dentistry, etc.) typically take 5-7 years, while the specialized institutions of university status offer programmes which last 4 to 5 years in engineering, business administration, etc. In humanities and social sciences, universities offer studies at two different levels. The lower degree (cand.mag.) is normally composed of a preparatory course in the history of philosophy and logic (1/2 year), two subsidiary subjects (1 year each), and a major subject (1 1/2 years). A higher degree (master's degree) is composed of a lower degree including a major subject which lasts for about 2 years. Studies in natural sciences and mathematics are similar to those in humanities and social sciences, but a lower degree is built up by a credit system - 10 credits per half year. A higher degree always includes a thesis.

Professional studies at universities are normally rather strictly regulated, while students in humanities, social sciences and natural sciences are free to choose subjects. Many students do not intend to take a degree, but only one or two subjects, often part-time.

The typical length of study in the non-university sector is 2 rs. These studies are normally vocationally oriented, but they may also be integrated in a university degree. Many students therefore move between different institutions and sectors. The lower degree may be granted by colleges as well.

A completed lower degree in humanities or social science in some studies automatically qualifies for advancement to studies toward a higher degree, other studies require marks at a certain level. Within some branches of study lower degrees can also be taken at the regional colleges or as a combination of courses from universities and regional colleges.

In the fields of business administration and technology an additional one-year education at technical colleges and some regional colleges confers the right to the Graduate Engineer or Bachelor of Commerce. Entrance requirements for these studies are three-years of education in engineering or economics.

3. The development on the supply side during the 80s

From 1974 to 1987, all expansion in higher education took place in the non-university sector, not only in terms of student numbers, but also in terms of resources. This development was indeed in line with political priorities. Short-term, vocationally-oriented higher education was given high priority, and this type of education was also demanded by the labour market. Especially fields like business administration and technology were to be expanded; much of the expansion took place in private institutions. Another important factor of priority was the weight on geographical decentralization of higher education which favoured the regional colleges.

The demand for higher education increased strongly after 1988. Growth in student numbers now took place at the universities, which have had a growth of more than 50 per cent during the last five years.

From the end of the 80s, the number of new students admitted to the humanities, social sciences, teaching and health service educations increased strongly. As Table 1 shows, until 1990 the number of graduates did not increase correspondingly.

From 1983/84 to 1989/90 the number of graduates from colleges nearly doubled. The main part of this growth took place in the field business administration at the regional colleges and at private institutions. Computer science and other studies at regional colleges and private colleges also had considerable growth. Growth in the number of students in teaching and health service educations was considerably weaker.

Table 1. Graduates by institution and level 1983/84 - 1989/90.

Higher education sector (HES)	1983/84	1987/88	1988/89	1989/90
Total	11452	15125	17665	18604
HES lower degree	1857	1702	1826	2048
HES higher degree	3565	3605	4065	4046
Regional colleges	6030	9818	11774	12510

Source: Central Bureau of Statistics, Educational Statistics

Compared to colleges, growth in the number of university graduates was modest until 1989/90. There has been growth in the number of university graduates since the first half of 1991, an aspect we will return to later. The main part of the growth until 1989 took place in business administration (higher degree) (MBA), graduate engineering and social sciences. In humanities and dentistry there was a reduction in the number of graduates, while there were only minor alterations in the natural sciences.

Table 2. University graduates with a higher degree (master's degree) 1983/84-1989/90 by field.

Field	1983/84	1986/87	1988/89	1989/90
Total	1916	1844	1849	1919
Humanities	268	198	199	235
Social scs.	204	306	297	303
Natural scs.	411	434	407	436
Health scs.	485	412	383	348
Other soc. scs./Theology	548	494	563	597

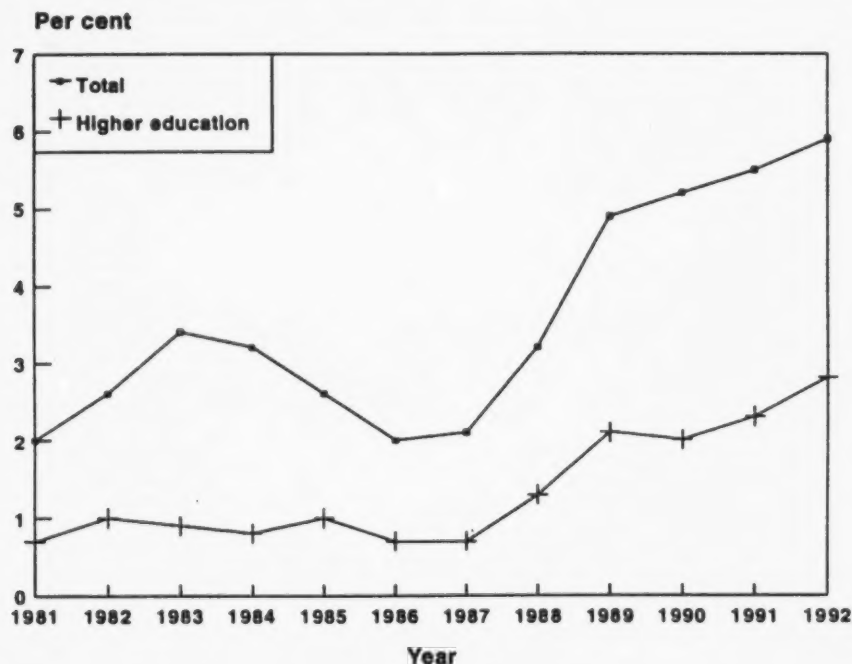
Source: Central Bureau of Statistics, Educational Statistics

4. Description of the transition from education to the labour market

In earlier sections we have shown that circumstances on the demand side differed considerably during the 80s. It has also become clear that the number of people with higher education has grown during the 80s. The Figure below shows how unemployment has changed over time for the working population with higher education compared to the working population in general.

Figure 1 shows that while unemployment for the total population differed during the 80s, unemployment among those with higher education was at a constant level, which was much lower until 1987. From 1987 there has been a gradual increase in unemployment for those with higher education as well, even though unemployment rates for those with higher education remain at a considerably lower level than for the total population. In 1992 unemployment among those with higher education was still below half of the total unemployment. Figure 1 gives thereby the impression that those with higher education as a group have had a relatively privileged position on the labour market compared to the total working population. The average figures can, however, hide major differences between different educational groups.

Figure 1 Unemployment rates



Source: Central Bureau of Statistics, Labour Market Statistics

The new graduates are, as a group, especially vulnerable faced with changes in the labour market. They are the first to notice possible crowding problems in the labour market. The new graduates might, therefore, have a considerably more difficult labour market situation than the impression given in Figure 1. In the rest of this paper we will take a closer view of how the transition from the educational system to work has developed during the changing conditions in the labour market in the 1980s. To analyse this problem we will use data from surveys of graduates done by the Institute for Studies in

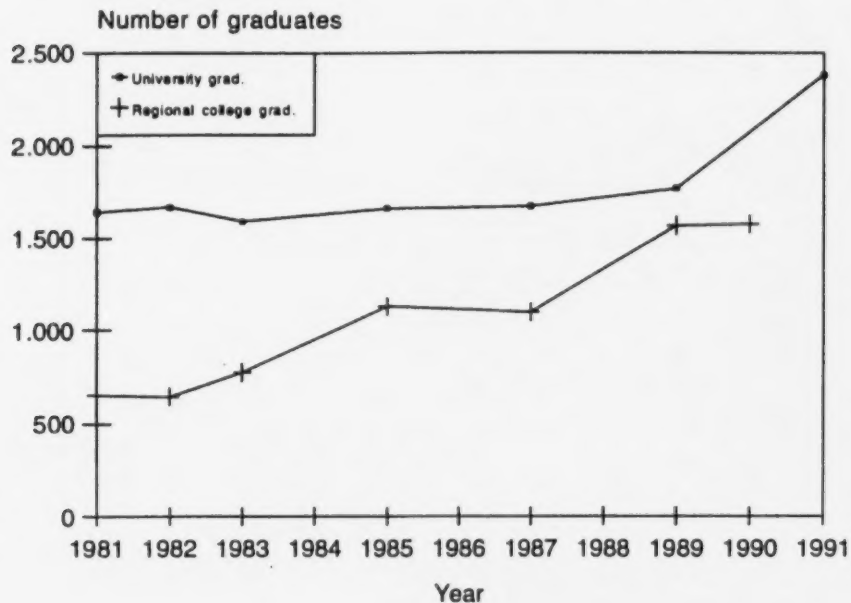
Research and Higher Education. These surveys examine the labour market situation among spring cohorts six months after graduation. Since 1972 the Institute for Studies in Research and Higher Education has carried out annual follow-up surveys of graduates. Until 1984 the surveys only included graduates from universities and regional colleges, later on graduates from other colleges have also been included. Six months after graduation, all the graduates from spring cohorts in the groups that are included in a specific year receive a questionnaire. The response rate has been between 80 and 90 per cent.

The results we intend to present include university graduates with higher degrees and graduates from regional colleges. This is because we have complete time series for these groups. University graduates with higher degrees (at a major subject, master's degree level or a completed final university examination) include graduates in the following subjects: humanities, theology, natural sciences, law, economics, psychology, sociology, political science, science of education, other social science subjects, dentistry, veterinary medicine, pharmacy, business administration, graduate engineering, architecture and agricultural sciences. The regional college graduates with a two- or three-year education are graduates in the following subjects: humanities, social sciences, media/communications, economics, environmental sciences, computer science and physical education. We do not include graduates from colleges specializing in educational studies (pedagogics), health services and social work or engineering. This is due to the fact that we lack satisfactory time series for these groups.

The following indicators of the transition from education to work will be used; how many got jobs, how many were unemployed or continued in the educational system, etc., and wages the employed received six months after graduation.

The Figure below shows the graduates included in our surveys from 1981 to 1991.

Figure 2 Number of graduates



Source: Institute for Studies in Research and Higher Education, Graduate Surveys

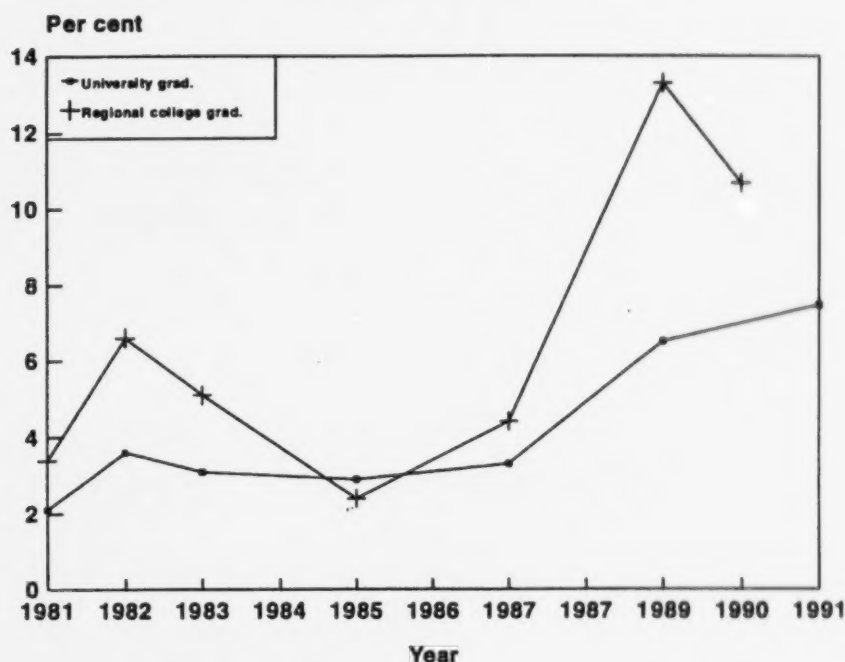
We see from Figure 2 that the number of university graduates in our surveys was at a relatively constant level (1 600 1 700) until 1989. The number of graduates then increased strongly, and in the spring of 1991 a total of 2 400 graduated from the universities with a higher degree. The increase in the number of graduates was especially strong among those graduating in law, business administration and graduate engineering (an increase of nearly 50 per cent), but there was also a significant increase in the number of graduates in the natural sciences and the humanities. At the regional colleges, growth in the number of graduates has been strong throughout the 80s, and the number of graduates has more than doubled during the period. Business administration graduates have continually been the largest group among the graduates from the regional colleges, and this group also had the strongest growth in the period (with a number of graduates that has nearly tripled). The percentage of business administration graduates of all regional college graduates has risen from 40 per cent in 1981 to 62 per cent in 1990. The strong increase in the number of graduates in subjects of business administration both at a university and college level is a result of the authorities' conscious investment in this type of education. Otherwise it is worth noticing that the increase in the number of graduates in total has been strongest at the end of the 80s, that is, the same period that unemployment problems in Norway seriously arose.

The Figure 3 below shows the percentage of the recent graduates who were still unemployed six months after graduation.

Not surprisingly, the unemployment rate among recent university graduates with higher degrees and graduates from the regional colleges during the whole period was higher than the unemployment rate among the population with higher education in general. Graduates from regional colleges had the highest unemployment rate in the period, and unemployment differed considerably more for this group than among university graduates. While the unemployment rate among regional college graduates generally followed the trends for the

working population in total, trends in the unemployment rates for university graduates had much in common with developments for all graduate manpower. It seems, therefore, that those with a short-term higher education are less "protected" against unemployment than those with a longer university education.

Figure 3 Unemployment rates among graduates



Source: Institute for Studies in Research and Higher Education, Graduate Surveys

According to Figure 3, regional college graduates had two periods with increasing unemployment; a short period in the early 80s where the increase in unemployment was relatively undramatic, and a period towards the end of the 80s where the increase in unemployment was relatively dramatic. In these periods, all groups of regional college graduates seemed to be affected by increasing unemployment. Looking at the period towards the end of the 80s, computer science graduates was the group hardest affected. However among business administration graduates, who constituted a considerable percentage of the regional college graduates, there was an obvious increase in unemployment even though this increase was not as dramatic as for computer science graduates. Both of these groups have had a substantial increase in the number of graduates² and in the early 80s they also had an extremely favourable labour market situation. Among other college educations, not currently included in our surveys, graduates from health and social work colleges and educational colleges have had a favourable labour market situation during the 80s. For graduates with a threeyear education in engineering, however, the situation changed dramatically during the last half of the 80s. While only two per cent of the engineering graduates were unemployed six months after graduation in 1985, nearly 20 per cent were still unemployed six months after graduation in 1991. During this period there has only been a slight growth in the number of graduates (an approximately 15 per cent increase). The development in the labour market situation for the health science graduates and the engineering graduates in Norway has thus been opposite to what has been observed in several other western countries.

Among university graduates, where the increase in unemployment first started towards the end of the 80s, especially graduates in humanities, some groups of social sciences, law, business administration, architecture and to a certain extent graduate engineers were affected by growing problems on the labour market. With the exception of graduate architects and graduates in the groups of social sciences, these were all groups that have had a major

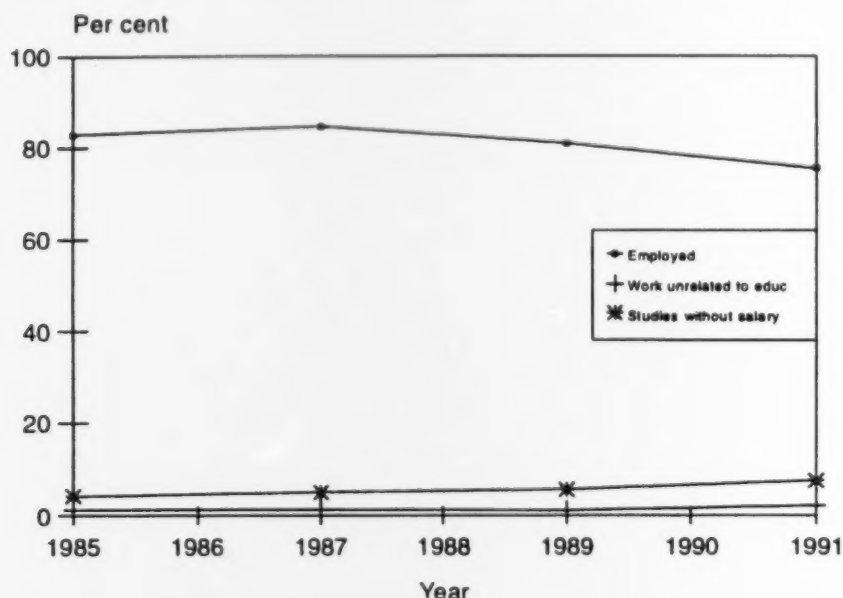
increase in the number of graduates towards the end of the 80s. Considering changes in the economic situation in Norway, it could hardly be seen as a surprise that business administration graduates both from the universities and colleges noticed increasing problems on the labour market. A strong increase in the number of graduates combined with the "collapse" within banks and financial institutions would inevitably have led to problems for this occupational group. Among graduates in the natural sciences, a group where there also was a significant increase in the number of graduates, there was no essential increase in unemployment. This indicates that the high unemployment rates among graduates towards the end of the 80s are partly connected to circumstances on the supply side, that is, the increase in the number of graduates, and partly to circumstances on the demand side.

What are graduates' strategies when labour market problems increase? Figures 4 and 5 below show graduates' main activity six months after graduation. Since we only have comparable figures from 1985 and after, we will consider the period from 1985 to 1990/91. This does, however, cover the period with increasing unemployment problems for both university and regional college graduates.

There has been a slight decline in the percentage of university graduates who were employed in relevant work six months after graduation, from 83 per cent in 1985 to 76 per cent in 1991 (Figure 4). During the period the percentage in work not relevant to their education was insignificant, while the percentage who continued with further studies without income nearly doubled, from 4 per cent in 1985 to 8 per cent in 1991. It seems, therefore, that further education (that is, to increase personal qualifications), is a way of solving problems due to unemployment, even though the extent of this behaviour seems to be of limited importance.

In regard to regional college graduates there have in part been dramatic changes in their main activity six months after graduation during the last half of the 80s.

Figure 4 University graduates by main activity



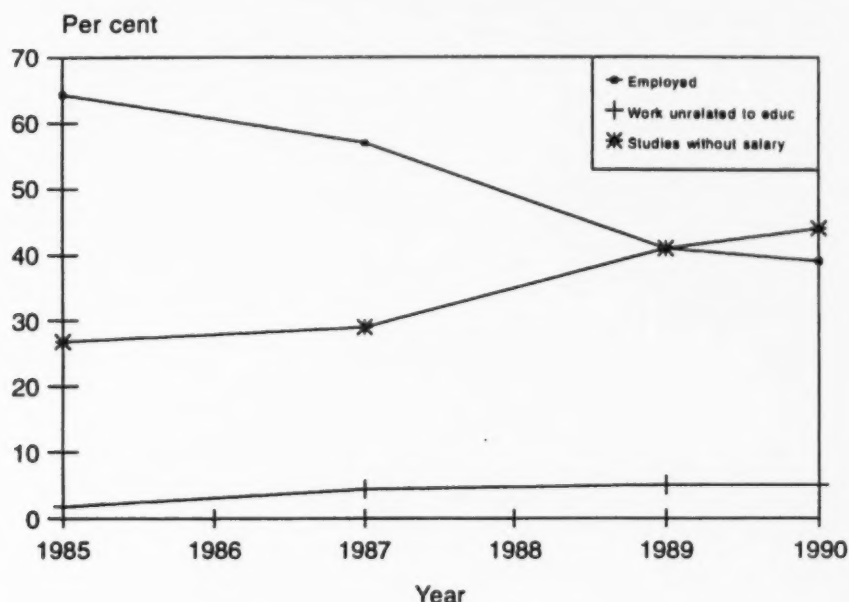
Source: Institute for Studies in Research and Higher Education, Graduate Surveys

The percentage of regional college graduates who were in relevant work six months after graduation has declined greatly during the period, from 64 per cent in 1985 to 39 per cent in 1990 (Figure 5). At the same time the percentage of graduates continuing studying without income as their main activity has increased substantially, from 27 per cent in 1985 to 44 per

cent in 1990. The percentage entering work of no relevance to their education is still at a low level, even though there has been an upward tendency in the period, from barely 2 per cent in 1985 to 5 per cent in 1990.

It is likely that the strong increase in the percentage who continue with further education partly is a development that would have come in any case and partly a result of the difficult labour market situation. During recent years several continuing courses (of duration 1-2 years) have been established at the regional colleges. At two of the regional colleges it is, for example, now possible to expand a two-year education in business administration to an MBA degree. The difficulties concerning entering the labour market have resulted in many choosing to strengthen their competitive situation on the labour market by taking further education. The increase in the tendency to enroll in further education has been possible partly because of the expansion of continuing courses at the regional colleges and the strong growth in capacity at the universities during the last 4-5 years. The increase in capacity at the universities is most likely a result of central government efforts to keep youth unemployment at a low level.

Figure 5 Regional college graduates by main activity



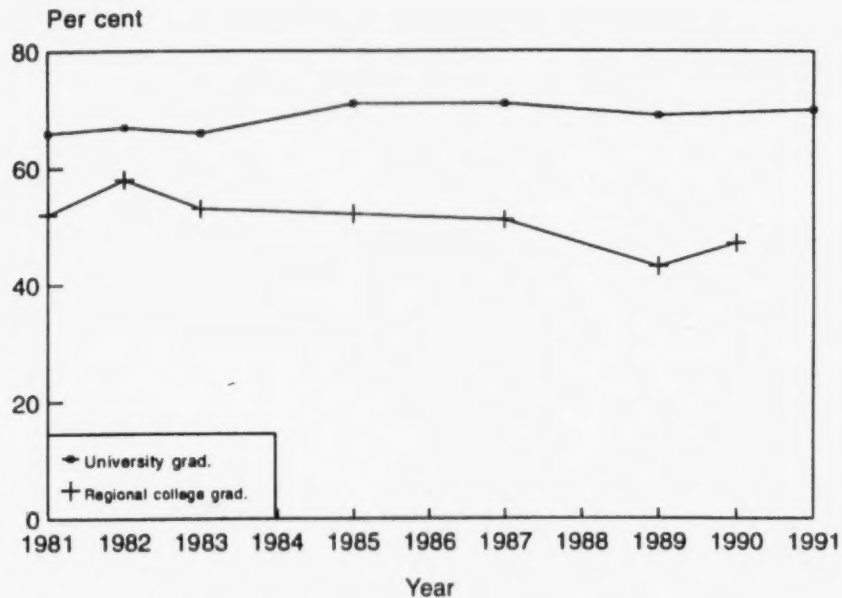
Source: Institute for Studies in Research and Higher Education, Graduate Surveys

The analysis so far has shown that the transition from education to paid work developed relative painlessly for university graduates until the end of 1987. Regional college graduates had slightly more difficulties with adjusting to the labour market in 1982/83 even though their problems could not be considered as dramatic. After 1987 the transition from education to the labour market has been problematic both for university graduates with higher degrees and for regional college graduates. This has been reflected in increasing unemployment, a decline in the percentage of employed and an increase in the percentage of graduates who continue to study six months after graduation. We have already seen that the percentage in irrelevant work in relation to their education among regional college graduates has risen from 2 per cent in 1985 to 5 per cent in 1990. What about those who have found work that can be said to be in reasonable accordance with their education, have they also entered jobs which require fewer qualifications than previously?

The graduate survey allows us to use two possible indicators of how "well" the jobs have suited the graduates' education during the 80s, i.e. the percentage who responded that their education agreed well with their work and the wages they received. These are both rough measures of how "suitable" the work is, and the results must therefore be interpreted with

caution. The Figure 6 below shows the percentage of those who had work in reasonable accordance with their education who responded that their education suited their work well.

Figure 6 Percentage of employed graduates in "good" jobs



Source: Institute for Studies in Research and Higher Education, Graduate Surveys

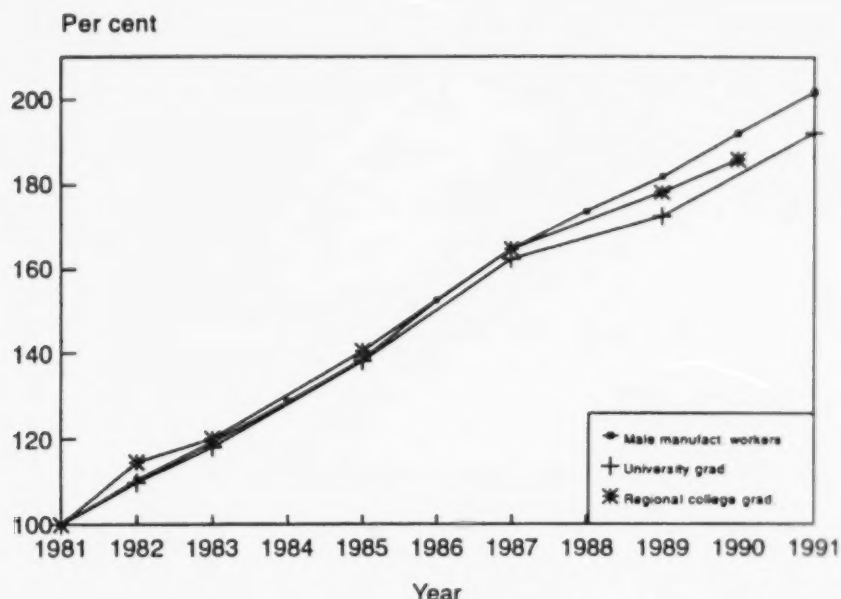
As we see, among university graduates the percentage of those who meant that their education suited their work well has changed relatively little during the whole period. Among regional college graduates, there seems to be a minor decline in the percentage who responded that their work corresponded well to their education. Using this particular measure one must, however, conclude that the graduates who first entered a job in reasonable accordance with their education only to a very limited extent seem to enter jobs requiring fewer qualifications at the end of the 80s than in the early 80s. For the time period from 1985 the surveys give the opportunity to introduce another indicator to examine how well the work suited the education, i.e. if job the graduates enter is at a level that requires university or college education. This indicator supports the conclusions from Figure 6; that there have not been any considerable changes in how "suitable" the jobs university graduates enter are, but there has been an increasing tendency that regional colleges graduates enter jobs which do not require higher education.

We will now consider salary developments of the graduates during the period, and compare this with the wages of male industrial workers³.

According to Figure 7, salary developments for university and regional college graduates more or less followed those of male industrial workers until 1987. From 1987 it seems that university and college graduates have dropped somewhat behind male industrial workers, especially university graduates. This development can, however, by no means be described as dramatic. We unfortunately have no data to throw light on whether this is an expression of a decline in wages for higher education graduates in general or a phenomenon which mainly affects new university and college graduates. What we have seen, however, is a strong tendency that groups with higher education who have had unemployment problems and who aimed for the private sector (e.g. graduates in business administration and to a certain extent graduate engineers) have had poorer salary developments than the graduate groups who mainly aimed for the public sector. Among graduates in humanities and law, who also have had increasing problems on the labour market, but mainly find their first job in the public sector, salary developments have nearly kept up with those of male industrial workers. This indicates

that to a certain extent there has been a market adjustment of the salaries for graduates employed in the private sector, this has however not been the case for those employed in the public sector to any considerable extent.

Figure 7 Wage Index, 1981=100



Source: Institute for Studies in Research and Higher Education, Graduate Surveys

The indicators we have to evaluate whether those who have found work in reasonable accordance with their education have entered jobs which require fewer qualifications at the end of the 80s compared to the beginning of the 80s, do not imply that there have been any major changes in the type of jobs graduates enter. We have, indeed, seen tendencies towards a slight decline in the percentage of regional college graduates who respond that their education suited their work well. There are also tendencies towards slightly poorer salary developments especially among university graduates compared to male industrial workers in the end of the 80s; there is however no reason to exaggerate this development.

Conclusion

The changing labour market conditions during the 80s have had consequences for the adjustment to the labour market for higher education graduates, especially towards the end of the 80s. During the first period of unemployment at the beginning of the 80s, only regional college graduates temporarily had a slightly higher unemployment rate. However, both regional college and university graduates felt the serious unemployment problems that struck Norway towards the end of the 80s.

Especially regional college graduates were seriously affected by unemployment problems, but the unemployment rate increased among university graduates as well. The increase in the unemployment rate is probably a result of circumstances both on the supply and demand side of the labour market. The strong investment in education in business administration throughout the 80s can partly explain the increasing problems for this group. The difficult labour market for graduates led to an expanding percentage of the graduates choosing to continue in the educational system, thereby strengthening their competitive position on the labour market. Especially among regional college graduates there has been a strong increase in the

percentage who have chosen this solution, but also among university graduates we have seen the same tendency. It also became more common to enter jobs which were irrelevant compared to the graduates' education, but still there are very few who enter this type of work. For those who have succeeded in getting a job in reasonable accordance with their education, the main picture seems to be that they did not enter considerably "worse" jobs than graduates previously in the 80s did, even though this varied a little among the different educational groups.

The large increase in capacity within higher education in recent years is to a great extent a result of political priorities to keep youth unemployment at a low rate. These politics have undoubtedly led to a lower rate of youth unemployment than we otherwise would have had, but will lead to large cohorts of graduates in the future. In case the labour market situation in general does not improve considerably in the coming years we will expect an even more difficult labour market situation for higher educated graduates, at least in the short run. The transition between education and the labour market will then inevitably become even more difficult than we have seen in recent years.

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Notes

1 Our definition of unemployed has changed slightly during the 80s. The changes have, however, little effect for the picture of the development of unemployment. Among the unemployed we reckon those who said they were mainly unemployed and who did not have work as their main activity, together with those who were in employment measures.

2 Both computer science and business administration subjects have had a strong increase in the number of graduates from **private colleges**, which indicates that the increase in the number of graduates with two- and three-years of college education is at a considerably higher level than that expressed by our figures.

3 For graduates we have information on gross monthly salaries and for male industrial workers gross monthly wages for all year and full-time employed.

Training and employment in hospitals

We shall use the information provided by a survey of the occupational integration of holders of higher non-university education diplomas to highlight a number of factors helping to characterize the job market in hospitals.

1. Occupational integration of diploma holders - form of the survey

At the Labour, Employment, Training Support Point (Centre for Regional Sociology and Economics - Free University of Brussels), we conducted a survey among diploma holders from French-speaking higher non-university education in the paramedical sector¹. In 1991 we questioned, by post, a sample of diploma holders graduating in 1985 and 1988, i.e. six and three years respectively after the completion of their studies. The findings made it possible for us to gather information on the occupational integration of these diploma holders and to deduce information on the operation of the labour market in the hospital sector.

We established our sample from a reference population (= addresses supplied by colleges accounting for over 90% of all diploma holders). The replies received (= sample) accounted for close on 50% of the reference population.

Table 1 - Number of persons contacted and percentages of replies obtained

Numbers	Persons contacted	Replies ²	%	Non-replies	Transfers away
1985	949	441	46.5	378	130
1988	948	483	50.9	364	101

Table 2 - Rates of reply by category of diploma holder

Diploma holders	Persons contacted	1985 Replies	%	Persons contacted	1988 Replies	%
Hospital nurses	542	264	48.7	473	229	48.4
Psychiatric nurses, midwives, paediatric nurses, social nurses	122	57	46.7	129	65	50.4
Lab technicians, etc.	81	28	34.6	110	59	53.6
Physiotherapists, speech therapists, etc.	204	91	44.6	236	130	55.1

2. School and occupational routes

The survey findings provided information on the school education of these diploma holders and on their subsequent occupational routes.

a. Prior to higher education

It would seem in the case of school education that most respondents attended a study cycle in higher non-university education immediately after secondary education (79% of student nurses and 62% of other graduates). A majority of the others attended university studies (13% of student nurses and 30% of other graduates). Studies in higher non-university education would therefore seem to be the first choice for these diploma holders as a whole. If, however, nurses are separated out from other graduates (laboratory technicians, clinical laboratory assistants, clinical chemistry and clinical biology graduates, physiotherapy, speech therapy, dietetics, ergotherapy and audiology graduates), it seems that the former opted for this as their first choice, while the latter opted for the most part for higher non-university education only at a later stage.

Table 3 Breakdown of respondents by situation prior to starting studies in higher non-university education

1988	Total population		Nurses		Other graduates	
	AV	%	AV	%	AV	%
Secondary	349	72	232	79	117	62
University	94	19	38	13	56	30
Other studies	26	5.4	12	4.1	14	7.4
(Other professions)	14	2.9	12	4.1	2	1.1
Total	483	100	294	100	189	100

b. After obtaining diplomas

After obtaining their diplomas, hospital nurses accounted for the largest number of people continuing their studies (42.8%). Most of those continuing their studies (64.3%) went on after hospital studies to psychiatric, midwifery, paediatric or social nursing studies (PMPS). After one or two years of supplementary study they obtained a qualification of a level equivalent to that already obtained previously. This choice may be shaped by the fact that employment conditions of PMPS nurses are more favourable or offer more prospects than hospital nursing. Those who did not choose PMPS specializations and continued their studies did so in most cases at university.

The continued study option is less frequent among other diploma holders in the paramedical sector (37.6%). In this group, those continuing their studies opted largely for university.

These findings would tend to show that a substantial proportion of diploma holders from higher non-university education in the health care sector are filling in time prior to finding their first jobs. It would seem that this trend is the more pronounced, the more the training involved is specifically hospital-orientated.

Table 4 Breakdown of diploma holders continuing their studies

1988 population	Total respondents	Continued studies (CS)	% of total	Higher non-Univ. specialism	% of CS	University
Hospital	229	98	42.8	63	64.3	26
PMPS	65	9	ns ³	6	ns	ns
Other graduates	189	71	37.6	18	ns	14
Total	483					1.1

c. Occupational integration

What do paramedical diploma holders do after their studies? A fairly accurate picture can be provided from the observation grid monitoring the situation of diploma holders quarter by quarter.

Employment levels for both populations of diploma holders (1985 and 1988) were very high throughout the period. Three months after obtaining their diplomas, some 73% of diploma holders were working, while 5.9% of the 1985 population and 7.7% of the 1988 population were unemployed. On final observation, employment levels were close on 90% (88.2% for the 1985 population and 86.1% for the 1988 population) and unemployment levels had more or less dropped to zero in the interim. The employment status of diploma holders changed substantially during the observation period. On initial observation, permanent, full-time jobs represented a minority (40.4% for the 1985 population and 45.3% for the 1988 population), first jobs generally taking the form of fixed-term, part-time, temporary jobs or even self-employment. On final observation, permanent full-time employment contracts had gained the upper hand: 88.2% for the 1985 population and 86.1% for the 1988 population.

These figures show that diploma holders in the paramedical sector had much higher employment levels than other higher non-university education diploma holders⁴ throughout the observation period. This advantage was much more accentuated at the beginning of the period, since over three quarters of paramedical diploma holders stated that they were working during the first quarter following the completion of their studies, while the figure for all sections of higher non-university education taken together was some 50%. At the end of the period (ten quarters), situations were, however, very similar with an employment level of 85%.

If nurses are separated out from other diploma holders in the paramedical sector, almost all diploma holders were either employed or studying at the beginning of and throughout the period in question. At the beginning of the period, nurses' employment levels were higher than those of other groups of diploma holders in the paramedical sector. Unemployed nurses were rare. Those who did not have jobs continued their studies. At the end of the period, employment levels were similar and very high. The number of permanent full-time contracts was, however, higher among nurses than among other holders of paramedical higher education diplomas.

People withdrawing voluntarily from the labour market accounted for insignificant percentages. These varied between four (1985 population) and six people (1988 population) at the beginning of the period and increased to eight and seven persons respectively at the end of the period.

d. Access to employment

Among ways of finding initial employment, most respondents felt that personal strategies were most important. Work experience periods and colleges were mentioned in second place (some 15% of respondents) as providers of access to jobs. Advertisements were mentioned in third place and personal contacts in fourth place.

Other ways of finding employment received very little support. Placement services (ONEM, subsequently FOREM, ORBEM and VDAB), in particular, were hardly mentioned.

e. First jobs

It is significant, in the first instance, that more than three out of four diploma holders worked in the hospital sector.

Overall, the majority of respondents worked, whether in hospitals or outside, in health care. Only some 7% of the persons questioned in the 1985 population and 9% of the 1988 population were employed in jobs outside the health sector.

Self-employment accounted for only a minority of overall numbers (10% for the 1988 population) and most diploma holders (over 75%) worked full-time.

A substantial proportion of respondents (27% of the 1985 population) were still employed in their first job at the end of the reference period. Some of those leaving their jobs had done so because their fixed-term contracts had come to an end (23%). Surprisingly, most of those who had left their first jobs (35% of all respondents) had done so at their own initiative. This

would seem to imply that employment is relatively stable and that mobility is for the most part voluntary.

It should be borne in mind, however, that the period during which these two populations of diploma holders were monitored corresponded to a period of employment growth. The 1985 population obtained their diplomas at a time when unemployment stopped increasing and fell for the first time since 1974, while the study ended in 1992 at the precise moment when there was a substantial rise in unemployment.

The performance in terms of employment of diploma holders from paramedical higher education was very favourable, however, in particular when compared with other types of education at the same level. It may be the case, however, that current increases in unemployment are also affecting diploma holders from the paramedical sector.

Table 5 Type of employment

Type of employment	1985 population		1988 population	
	n	%	n	%
Hospital nurses	214	62.9	212	49.4
Nurses outside hospitals	41	12.1	50	11.7
Paramedics	46	13.5	86	20.0
Lab technicians	16	4.7	42	9.8
Outside health care sector	23	6.8	39	9.1
Total respondents	340	100.0	429	100.0

Table 6 Employment status

Status	1985 population		1988 population	
	n	%	n	%
Employees	311	93.4	398	89.4
Self-employed	22	6.6	47	10.6
Total	333	100.0	445	100.0
Full-time	263	78.0	346	77.1
Part-time	74	22.0	103	22.9
Total	337	100.0	449	100.0

3. The labour market and the paramedical professions in the hospital sector

a. Hospitals - centres of professional skills

The categories of personnel examined in the survey are in some ways health professionals: nurses (hospital, psychiatric, midwives, paediatric nurses, social workers), laboratory technicians, physiotherapists, speech therapists, etc. In order to obtain their jobs they had to attend prior training and obtain recognition for their work. These categories are in contact with other professionals within hospitals, particularly doctors.

These various categories of personnel also work with non-professionals, "non-qualifieds" as they are often called in current jargon in the profession. These include nursing assistants and auxiliary staff.

Overall, this personnel could be further sub-divided into three categories. Those working full-time at hospitals (employees), those in in-service training (trainees) as well as a non-negligible proportion of voluntary workers.

b. Calling and occupation

These latter two groups each belong to one of the two poles which have shaped hospital work over the years: the hospice and the charitable tradition. Hospitals made rapid progress in the Middle Ages in the context of religious and charitable institutions, before becoming secular after the French Revolution. Since hospitals required charitable endowments they entailed, as in the case of the religious communities, a confusion between private and professional life. Aid is in this case unbalanced, as beneficiaries cannot return that from which they have benefitted. Voluntary work in hospitals fits well into this tradition of good works. Over time, it has taken various forms: chosen work, underpaid work, devotion or even, with the help of unemployment, queues for jobs which might become vacant.

On the other hand, practical experience is part of the professional side of hospital work. Medical knowledge has been developed "around the patient's bed" since the 18th century. Hospitals have therefore become places in which the scientific knowledge of medicine is simultaneously put into practice and developed. The various professions responsible for hospital care consequently have to become experienced in practical work as well. Practical training periods are consequently an important stage of professional development and trainees take part in a fairly substantial way in health care.

c. An internal market

The hospital labour market might be defined as an organization entered by people who acquire experience and may move (between jobs or by promotion) according to internal rules on entry, advancement and dismissal, taking account of the state of the external supply of and demand for employment. It is therefore the institution that allocates jobs and relates them to diploma holders whose entry conditions it formulates itself. Practical training periods are an integral part of training and may also be one of the factors facilitating access to employment. Hospitals also lay down the possibilities for practical apprenticeship leading to diplomas and the relationships between diplomas and jobs through recruitment procedures. Hospitals therefore organize the activities of the individuals which they employ within a system of constraints which characterize its internal market.

The internal management of hospital employment, as a result of its history, is permeated by a continuing tension between the notion of a vocation which shaped it in the past and the professional profiles which currently occupy it. This tension takes on a particular shape when it is borne in mind that the paramedical professions and particularly the nursing profession are for the most part women's professions⁵. In this case, the vocation is accompanied by qualities which are supposed to be associated with the "feminine nature". The profession is then determined "around the person of the nurse" rather than by nursing tasks. There is then an easy parallel between the tasks of nurses and domestic work where "devotion" may be considered normal and goes unpaid for this reason. Moral qualities are not easy to codify and consequently to remunerate. They involve the relationship skills of each individual. This situation explains many of the comments made during the survey: "tasks connected with medical instructions account for only 40 to 60% of the activities of nurses", it is said, "and the remainder goes unrecognized".

Advances in hospital work make it necessary, however, to provide proof of increasingly high-level qualifications in three areas: techniques, relationship skills and administration and management.

It is precisely the telescoping of these two models, i.e. the vocation and the profession, that Danièle Kergoat sees as the main cause of the current problems affecting nursing⁶.

d. A changing view of employment

The ways in which jobs are currently recognized in hospitals and advances in hospital work have led to far-reaching changes in the paramedical professions.

The first, which is not specific to health care but is linked to the continuing increase of working women in almost all sectors of activity, is entailing a clear-cut dissociation "of women's roles and individual qualities, on the one hand, and professional roles, on the other hand"⁷. There has therefore been a breakaway from the vocational aspect of nursing and an affirmation of its professional nature.

This affirmation seems to be that hospital jobs are jobs like any other but have particular requirements in terms of the specific implications of health care.

As discussions with supervisory staff showed, in terms of the actual performance of tasks, there seems to be no difference between nurses with diplomas and registered nurses. In other words, the recognition which nurses receive is based on aspects linked to practical work and to personal characteristics but not to intellectual knowledge and the more fundamental aspects linked to the function. In contrast to the opinions of supervisory staff, there is another view which stresses the underuse and lack of recognition of professional skills of a more intellectual type.

In terms of recruitment and personnel management, many practices are connected with financing constraints. The managerial and administrative component therefore accounts for a non-negligible proportion of activities.

Entry into a hospital career seems to be reserved for the most part for young people. The normal procedure is therefore to recruit diploma holders completing their education. It is possible to ask, however, whether there is not also a potential for recruitment among former nurses who gave up their jobs in the past but who wish to return to work. The data which we possess do not make it possible, unfortunately, to look at this question in detail.

In terms of career progression, it would seem that mobility between different jobs is not very great. For the most part mobility, although limited, is vertical towards a specialization or the job of head nurse, middle manager and head of the nursing department. In contrast, horizontal mobility which would make the operation of services more flexible seems particularly restricted, if not non-existent.

In hospital environments, bearing in mind the specific nature of working situations linked to care needs, the two central notions of the labour market, which relate the jobs available as a function: 1) of people's qualifications and 2) of their availability in terms of time, are accentuated. There are unusually heavy requirements in terms both of professional skills and personal availability.

Notes

¹ **Martinez E., Vanheerswynghe A.**, "Insertion des diplômés de l'enseignement supérieur non universitaire, groupe paramédical" (Integration of diploma holders from higher non-university education, paramedical sector) in *Blouses blanches en colère, hier ou demain? Radiographie du personnel soignant*, Point d'Appui TEF, Dossier No 2, 1992, pp. 41-52; and for a description of the methods used, **Desmarez P., Martinez E.**, "Contribution à l'étude des trajectoires professionnelles: l'exemple des diplômés du supérieur non universitaire" (Contribution to the study of occupational paths: the example of diploma holders from higher non-university education) in *Méthodes d'analyse de l'insertion professionnelle et du marché du travail*, Point d'Appui TEF, Dossier No 1, pp. 31-37.

² These totals do not include unusable replies.

³ ns = non-significant.

⁴ **Dupont P., Ossandon M.**, "L'insertion professionnelle des diplômés de l'enseignement supérieur non

universitaire" (The occupational integration of diploma holders from higher non-university education), INAS, Université de Mons-Hainaut, 1991, 242 p.

⁵ It is for this reason that it seemed appropriate to write in the feminine [a distinction which is not so evident in English].

⁶ **Kergoat D.**, "A propos des enjeux en matière de qualification du mouvement infirmier en France" (Comments on qualification issues in the nursing movement in France), in *Blouses blanches en colère: hier ou demain? Radioscopie du personnel soignant*, Point d'Appui TEF, Dossier No 2, 1993, pp. 63-69. It is from the works of D. Kergoat that we have borrowed the notion of a tension between vocation and profession in order to understand the nursing profession.

⁷ Idem, p. 67.

Family social status and paths of youth in the systems of education and on the labour market

Abstract

This report presents a new reading of the data relating to continuation of one's studies, school guidance, and working paths, drawn from the results of ISFOL's Eva surveys, interpreted in the light of the social status index used in the surveys.

The analysis of the educational and professional paths developed in the course of time - an analysis which is made possible only by making use of longitudinal surveys - tends to show that social origin has a strong influence not only on the social composition of the different educational paths of the new generation, thus determining a social selection and a potential reproduction of one's social origin, but it also produces its effects - educational qualifications being equal - on the opportunities of finding a job, on the flows of mobility in the different positions on the market, and on the quality of the occupation. The analysis shows as well that such a correlation, which is clearly influenced by the value in exchange of the educational qualification obtained, can be also unleserlich in the unleserlich of young people holding strong degrees.

Three degrees have been taken into account: the Humanities, Law and Engineering; these courses of study have been the object of longitudinal retrospective surveys conducted by ISFOL, between 1989 and 1991, on national representative samples based on sex, geographical area, and educational establishments.

The status index which indicator of social origin. The purpose of this text is therefore to give a cue for the development of a methodological debate within the European network "Transition in Youth", for the definition of a family social status index which can be used for the longitudinal surveys on transition to active life.

1. Student selection and the influence of family social origin

In the last 25 years in Italy the new generations of boys and girls have attained to higher levels of education.

In spite of the emphasis with which this process of change in education has been presented by scholars and experts of the subject, the process of mass education, however, seems to be still in process and varying according to social ranks and territorial areas of the country.

In fact, if one analyzes the data relating to the dropouts who withdraw from school at the first and second phase of secondary education, one notices that about 10% of young people are not able to obtain an intermediate school certificate and that 25% of students quit the upper secondary school in the first three years of the course, without obtaining any educational qualification.

In the last few years, however, upper secondary schools seem to be more oriented, as opposed to the past, towards a minor selection of the students enrolled; but by excluding only young people that they consider unfit in terms of knowledge acquired, "unconsciously" they tend to exclude especially young people belonging to medium-low social ranks.

Even though student selection is performed by means of objective instruments for the caring of knowledge, it becomes directly, for certain categories of young people, an instrument of social selection. As a matter of fact, apart from exemplary cases of educational establishments which have started ad hoc experiments, the structure of education does not seem to be provided with methodological and organizational instruments which may help to make up for lack of basic knowledge and general education, which is at the basis of the difficulties encountered at school by the young who live in culturally backward social spheres.

There is no doubt that the raise in the levels of education has affected all categories of people and at all social ranks; but it is also necessary to point out that there are and there will always be phenomena of creeping student selection, which often are indirect mechanisms of social selection.

It is a situation that seems to call in question not only the lack of pedagogical and educational innovations in the Italian system of education, but also the labour organization of the firm-school system, which appears to be inadequate to meet the training needs of the new individuals. As a matter of fact, the system is attached to forms of school organization, types of teacher professionalization as well as to methodologies of transfer of knowledge and development of skills, which are no longer fit for preparing the new ruling classes of this postindustrial society.

The educational system is a complex organization, which at present has innate in itself the germ of a possible exclusion of socially less fortunate groups of people and that in general does not seem to be very efficient: out of 100 young people holding an intermediate school certificate, only 9 will succeed in getting a university degree (Note 1, Table 1).

The decision of continuing with one's studies and the choice of enrolling at a certain upper secondary school rather than another seem to depend on the socioeconomic status of the family to which one belongs. Families belonging to medium-high social classes are more inclined to enrol their children at a *liceo classico*, specializing in the humanities, or at a *liceo scientifico*, specializing in scientific education, and like educational establishments, whereas families belonging to low and medium-low social classes seem to prefer to guide their children towards technical and vocational schools. Different choices that involve social differentiation in the presence of young generations at school and produce their effects on the economic and working life of adults.

The choices regarding university faculties are less influenced by social origin: nevertheless, the selection and differentiation of paths made during the course of study tend to reduce the presence, in the university system, of socially less fortunate groups of people, thus unbalancing the system in favour of the higher social classes.

Not only do we witness a phenomenon of translation of mobility processes, through which the distances between the various social classes, instead of being reduced, remain unchanged as a result of greater access to education, but school egalitarianism itself seems to have remained a procedure to be improved. At present, in fact, it is possible to see that a process of selection is still present and, with the passing of time, reduces, in the paths of university education, the presence of young people belonging to families of low social status.

A selection resulting from passing through some critical stages of the educational system:

- passing from the lower secondary school and enrolling at an upper secondary school;
- the first two years of upper secondary education;
- passing from the upper secondary school to university;
- the first three years of university education.

The number of students who continue with their university education after concluding the upper secondary school studies is a quite clear evidence of this process of social selection, which takes place in the course of the educational path.

The data relating to the regularity of students' career and the number of students who continue with their studies, closely related to the social status of the family to which they belong, seem to confirm this hypothesis.

Those who come from families belonging to medium-low social classes seem to be more liable than others to discontinuation or irregularity in the course of study. (Table 2).

2. Social status: an interpretative factor in the analysis of university paths

The Italian system of university education is characterized by low output: in fact, only 35% of the students enrolled succeed in concluding their university studies.

An element which seems to take part in the mechanisms of successful academic performance is the holding of a school-leaving certificate of a liceo classico (classical high school) or a liceo scientifico (scientific high school), or like educational establishments; as a matter of fact, these schools offer a course of study to which only very few students belonging to families of low social status have access.

The number of students holding a school-leaving certificate from classical or scientific high schools, or the like in 1990 accounted for 22% of all students holding a school-leaving certificate; and it is in this group that most students continued with their university education.

The data collected in 1990 relating to the flows of entrance and withdrawal from the university world shows that, on enrolling, the students holding the above school-leaving certificate accounted for 40% of the total number of students enrolled and that, after graduation, this number reaches 70%. The success of these students has in itself the germ of a social selection and contributes to maximize the elements of social selection which has previously taken place in the educational path.

The data relating to the three retrospective surveys conducted by ISFOL, from 1989 to 1991, on students graduated in three faculties of different value of efficiency on the market: the Humanities, Law, Engineering (ISFOL's EVA survey), show the weight that the social origin of the family to which a graduate belongs has not only on the educational paths, but also on the way and quality of entrance in the world of work.

The data relating to the students enrolled in the three faculties taken into account in this report (very different faculties in the contents of their curriculums and in the professional opportunities they may offer) show that the students holding a school-leaving certificate of classical and scientific high schools and the like, account for the greater number of the students enrolled: they are in the majority in the faculties of Law and the Humanities and account for 45% in Engineering; they are followed by the students holding a technical school-leaving certificate (accounting for a large number among the students enrolled in Engineering), whereas there are very few students holding a vocational school-leaving certificate.

On concluding the course of study of university education the 1/5 of those who have graduated in Law and the Humanities and the 2/3 of Engineering are students coming from classical and scientific high schools or like educational establishments; the weight of technical schools is considerably reduced, and the weight of students coming from vocational schools has become quite negligible (Table 3).

Furthermore, as far as classical and scientific high schools are concerned, the students enrolled tend to follow different university paths: those who possess a classical school-leaving certificate are more oriented towards classical, legal and economic faculties, whereas those who hold a scientific school-leaving certificate are more oriented towards scientific faculties. The main evidence is that the course of study of university education are designed especially for students coming from classical and scientific high schools, and the like. (Table 4). Such clear evidence leads to two hypotheses:

- a) that classical, scientific and like high schools are in a position to provide the best preparation for access to all university education (no reforms have been introduced in the field of upper secondary education);
- b) that the belonging to a certain social class, characteristic of those who enrol in the above educational establishments, influences the success of academic performance.

From this point of view the two hypotheses are not considered conflicting, but the aim is to show that family social origin is still to be considered as a key factor in the interpretation of educational choices, academic achievements, as well as future professional paths.

Those who graduate in Law, the Humanities or Engineering differ greatly in the social origin of their families: medium-high social status is predominant. 90% of the students holding a degree in the Humanities, 78% of Law graduates and 50% of Engineering graduates belong to high and medium-high social classes. (Table 5)

A degree in Engineering is considered a degree leading to strong social mobility. Having a son graduated in Engineering is the maximum aspiration for a parent with low-level education and occupation. The presence, among the students enrolled in Engineering and in part among Engineering graduates, of young people coming from technical schools and of medium-low social status has its interpretative key in the symbolic credit that is socially attributed to Engineering students.

The analysis of the distribution of graduates based on the variable "father's education" shows the tendency of those who have a medium-high level of education to reproduce the same level of education in their children: 50% of the fathers of the students belonging to the group of graduates hold a secondary school-leaving certificate or a degree; the level of father's education is higher in Law graduates and lower in Engineering graduates (Table 6).

The average level of education of the fathers of the students belonging to the sample examined is certainly higher than the educational qualification of those who at present are above the age of 50 (age-group of reference).

As a matter of fact, the data relating to the population of males above the age of 50 show that about 80% of those belonging to this category of people hold a lower secondary school certificate and that about 56% have no educational qualification or a primary school certificate.

The interpretation of the data based on the variable "father's occupation" shows a composition of the family of origin which differs greatly in the "father's occupation" from that resulting from the data relating to occupation of males above the age of 50.

In fact in the three groups of graduates there are almost no individuals of rural origin and few individuals from the working class; those belonging to the medium-high class are in the majority, with the nonnegligible presence of managers and professionals, whereas there are very few representatives of the category of people working on their own, a varied group in which medium-high and medium-low social ranks live together (the latter being the predominant) (Table 7).

With particular reference to a hypothetical universe of individuals belonging to the same age-group of the interviewees' fathers, the emerging reality shows a much larger representation of managers and professionals and a smaller representation of individuals coming from the working and rural classes.

Social origin, continuation of one's studies and obtaining of a degree seem to be correlated variables, even though the variable "social status" cannot be the only interpretative key in studying the university educational paths.

On the one hand, therefore, the fact that medium-high classes are in the majority in these groups of graduates shows a slow current process of social mobility, on the other, the examination of the level of education and occupation carried out by the married or unmarried partners shows the tendency to reproduce the social class to which they belong even in the new family. About 50% of the graduates from the three faculties taken into account are married or live together with another graduate, and this percentage reaches 85% if one includes those holding a school-leaving certificate; furthermore, the higher the social status of the family to which one belongs, the greater the tendency to live with a partner holding a degree, as well as the lower the status of origin, the larger the presence of partners with a low-level education.

In the end, it seems that the variable "social status" can be used for interpreting some qualitative data such as: motives for enrolment and choice of a certain faculty, expectations from one's studies, as well as the consistency of the university course of study chosen. It has been noted, for example, that there is a correlation, in all the three faculties taken into account (even though with a different correspondence ratio), between family social status and duration of the course of study. The graduates of high social status seem to have (in the three faculties) twice as many opportunities of concluding their studies regularly as the graduates of low social status.

3. Opportunities of status and opportunities of market

The three surveys in question make it possible to reconstruct the paths inside and outside the labour market during the three years immediately following graduation. Even though at the

end of this period the conditions in the three groups seem to be very different as a result of the different use they can make of the degrees, the belonging to a certain social class plays a nonnegligible role in the individual placement of the different groups of graduates on the labour market: therefore, the variable "social status" can be used as explicative and previsionsal factor for the condition of individuals holding different educational qualifications.

With particular reference to the degrees that provide credentials of low or medium value on the labour market, the influence of the origin of the family to which one belongs seems to be of particular importance: the number of workers increases and the number of nonactive and unemployed persons decreases as the family status rises. The probability for the graduates in the Humanities of high social status of being employed in the three years following graduation in three times as much as for those coming from families of low status, and the ratio goes down to 2 to 1 for the Law graduates, whereas the graduates in Engineering seem to have quite the same opportunities.

The "weaker" the degree one holds, the greater the influence that the social origin of one's family has, an influence which seems to have a lasting and even increasing impact also on the processes of first entrance and first working mobility, processes in which the importance of the family status seems to apply also to those holding "strong" degrees.

To this end, there are data to point out relating to those who belong to families of high socioeconomic status; in the group of graduates in the Humanities as well as in the group of Law graduates, the percentage of workers reaches 100%. (Note 2) (Table 8)

The condition reached about three years after having concluded university education clearly presupposes a path, often complex and tortuous, of entrance and withdrawal from the training system and the world of work.

The analysis of the paths based on the variable "social status" makes it possible to point out great differences in the paths of the individuals examined inside and outside the labour market.

Not only does the final condition seem to be conditional on the belonging to a certain social class, but the paths into the market seem to be influenced by the social rank of the family of origin; the belonging to a certain social class seems to play a fundamental role for the graduates in Law and in the Humanities, but it seems to have a nonnegligible part also for Engineering graduates.

It should be noted that the young graduates in the Humanities from families of low social status have followed tortuous paths of entrance and withdrawal from the labour market; only 23% of these graduates have always worked, 20% of them have never been able to find a job, and the rest have experienced alternating periods of entrance and withdrawal. On the contrary, those who hold the same degree but belong to families of high social status have always worked in 71.4% of the cases, while the remaining 28% have experienced periods of withdrawal from the labour market, but in the end have succeeded in reentering it.

The Law graduates seem to have encountered minor difficulties. While at the level of low social class only 50% of graduates have kept their posts, this percentage doubles for the graduates belonging to the high social class. Minor differences are also found in the paths of the Engineering graduates as a result of social status (Table 9/10).

If, in the end, the single groups are analyzed, by the recalculating them in percentages on the basis of the status, and their composition is compared with that of the sample of origin, the result is that in the group of graduates in the Humanities and Law the low social status has a smaller representation among those who have never lost their jobs and a larger representation of this status among those who have never entered the labour market or have entered and then have become nonactive (Table 11).

The analysis of the flows of entrance-length-withdrawal from different occupations in the course of the years taken into account in these surveys makes it possible to detect great differences in situations and paths based on the social status of origin.

This report describes the flow analysis relating to the graduates in the Humanities which points out the strong relationship existing among the paths of stability, the paths of marginality and the social status.

The flow analysis of the conditions of graduates in the Humanities between 1987 and 1991 shows the existence of various types of paths: the two extreme types are represented by those of low social status and those of high social status; in the course of time, those belonging to the first type pass through different conditions of unstableness, marginality, stability, and loss of their job, or absence of working activity, which enable only 66% of these graduates to be employed. Those belonging to the second type experience only an incremental flow in the transition from the condition of student to that of worker, and after two years all these graduates are employed and keep their job throughout the following year.

The two other groups of medium-high and medium-low social status experience different situation and paths: those of medium-low status are closer to the first type and those of medium-high status to the second.

But being employed does not always mean holding a stable and sure position in the course of time: it also means carrying out an activity on an unstable and occasional basis. If one analyzes the paths of unstableness and stability of occupations, one can notice a difference in the types of paths to employment strictly dependent on family social status.

With the passing of time, in the case of occupations of medium-high and high level the presence of young people decreases among those on a temporary position who tend to be employed in stable occupations and a mobility of those employed on a permanent position is observed towards activities as professionals; on the other hand, in the case of low social status the flow of young people entering and remaining employed on a temporary position can be estimated at about 47% and the flow of mobility from the various conditions to permanent positions is very slow (Table 11).

Furthermore, the professional positions held are rather different; interpreting this differentiation as dependent on the social status makes it possible to advance the hypothesis of a possible influence by the family status and, therefore, by the connections of the family of origin, not only on the opportunities in seeking a job but also on the quality of the position held.

In this connection, the trend of the variable "social status" is emblematic for the position of professional for Law graduates, or for the position of manager and executive for the graduates in the Humanities, or of professional for the graduates in Engineering (Table 12.1, 12.2, 12.3.)

In the transition from a generation to another the individual clearly witnesses a shift of professional conditions. Table 13 relating to the flows of transition from the generation of fathers to the generation of sons graduated in Law points out this trend; however, the transition flows show a tendency towards permanence of the condition of origin in the different generations on the basis of the father's professional origin: the level of the medium-high professional positions held by the young rises as the level of their father's occupation rises (Table 13).

The tendency to hold higher professional positions as the social status of the family to which one belongs grows higher is in a way confirmed by the level of income earned by the three groups of graduates.

As for the two degrees that potentially provide limited credentials for access to the world of work and for the quality of the professional positions held, the correlation between earned income and the belonging to a certain social class is clear: the lower social status group and the higher social status group are placed in the two opposite quadrants of income (< 25 million lire, > 25 million lire). Also for Engineering graduates, whose degree is considered of great bargaining power, it is possible to point out a correlation between the social status of origin and earned income (Table 14).

Not only, in the end, do the presence in the world of work, the condition of stable or unstable occupations, and the placement in a position, seem to be influenced by the social origin of one's family, but also the presence in the world of work, the choice of entering the labour market and the discouragement in the course of time from seeking a job, seem to be influenced by the social origin and, on indirect assumption, by the good opportunities of work that one's family can offer through its connections; an influence that, as shown by the data relating to nonactive people, with reference to the graduates in the three faculties taken into account, seems to be more or less strong according to the type of degree taken and its value in exchange on the market.

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Notes

Note 1) The family social status index is used in the analyses of all ISFOL's EVA surveys; it has been worked out from the following variables: mother's and father's education and mother's and father's occupation. Four indicators have been chosen for the level of education (primary education, lower secondary education, upper secondary education, university education), six indicators for the professional status (entrepreneur, professional, manager, executive, employee, worker), and specific weights have been attributed to these indicators. The scale thus obtained has been divided into five and then into four categories of family socioeconomic status.

Note 2) Obviously, the status index as it is presented in this report does not turn out to be exhaustive in the analysis of the influence that the family of origin can have on the working processes. In fact, in this case it is also necessary to make use of "family social network" indexes, of origin and current, worked out on the basis of the following variables: income, level of family cultural backgrounds, relatives (education-occupation), and geographical area. These are complex indexes that were worked out and used by the writer in a previous survey on families, carried out in 1962 by ISFOL, and that are being redefined for the next EVA survey on Graduates.

Table 1 Failure rates in the school system according to father's level of education and family social status

	no	Failures yes	unknown	Total %	Number
Father's education level					
elem. school certificate	73.9	25.5	0.6	100	2,221
interm. school certif.	75.8	23.8	0.4	100	1,561
upper secondary certif.	80.2	19.5	0.3	100	975
university degree	92.6	7.1	0.3	100	378
total	77.1	22.5	0.4	100	5,135
Family socio-economic status					
low	75.8	23.5	0.7	100	690
medium-low	73.8	25.7	0.7	100	1303
medium	79.6	19.9	0.5	100	437
medium-high	78.8	20.9	0.3	100	1179
high	89.1	10.5	0.4	100	523

Source: Isfol VI EVA survey

Table 2 Rate of continuation from upper secondary school to university according to family social status - in percent

Family social status	Rate of continuation
low	20
medium-low	31
medium	30
medium-high	45
high	76

Source: Isfol VI EVA survey

Table 3 Graduates of humanities, law and engineering courses according to type of school-leaving certificates - in percent

Degree	Class./Sci. high school	Technical institute	Vocational institute	Other institutes	Total
Humanities	86.8	6.5	1.0	5.7	100
Law	89.4	7.3	1.0	2.3	100
Engineering	75.0	24.4	0.6		100

Source: Isfol, EVA survey of graduates

Table 4 Graduates of humanities, law and engineering courses according to type of school-leaving certificates - in percent

Certificate	Law	Humanities	Engineering
classical high school	54.9	57.4	12.5
scientific high school	32.7	25.4	62.2
other secondary school	1.9	4.0	0.2
technical institute	7.3	6.5	24.5
vocational institute	0.8	1.0	0.6
other	2.4	5.7	
Total	100.0	100.0	100.0

Source: Isfol, EVA survey of graduates

Table 5 Social status according to university course - in percent

	High	Medium-high	Medium-low	Low	Total
Engineering	20.08	22.05	38.85	19.02	100
Humanities	22.17	48.78	22.78	0.37	100
Law	31.17	57.23	11.11	0.50	100

Source: Isfol, EVA survey of graduates

Table 6 Level of education of the male population above the age of 50 - in percent

without elementary school certificate	55.9
intermediate school certificate	22.9
upper secondary school certificate	13.9
university degree	7.6
total	100.0

Source: Istat labour force, 1990

Table 7 Father's occupation according to type of university degree

Occupation	Humanities	Law	Engineering
entrepreneur	1.75	21.00	5.00
other self-employed	4.92	9.40	17.30
liberal professions	9.47	11.80	10.80
manager	9.84	10.30	11.00
executive	0.11	8.10	6.40
teacher	6.24	0.70	3.90
employee	60.05	29.90	30.90
specialized worker	2.70	2.70	9.30
worker	4.13	5.70	4.40
farmer	0.79	0.40	1.00
total	100.00	100.00	100.00

Source: Isfol, EVA survey of graduates

Table 8 Labour market situation according to type of university degree and social status - in percent

	Humanities Status				Law Status				Engineering Status			
	L	M-L	M-H	H	L	M-L	M-H	H	L	M-L	M-H	H
employed	31	73	86	100	58	75	84	100	95	94	95	95
1st job	15	5	3		32	19	11		3	5	3	3
unemployed	40	17	7		5	4	3		1	1	1	
non-active	14	7	4		5	3	2		1		1	2
Total	100	100	100	100	100	100	100	100	100	100	100	100

Source: Isfol, EVA survey of graduates

Table 9 Labour market routes according to type of university degree and family social status - in percent

	Humanities Status				Law Status				Engineering Status			
	L	M-L	M-H	H	L	M-L	M-H	H	L	M-L	M-H	H
always worked	24	61	73	72	50	68	75	100	78	83	84	85
never worked	20	5	3		36	21	14		3	5	3	3
withdrew and re-entered	24	21	19	28	6	6	8		17	11	12	11
entered and withdrew	31	13	4		6	4	3		1	1	2	1
never re-entered	2	1	1		2	1						
Total	100	100	100	100	100	100	100	100	100	100	100	100

Source: Isfol, EVA survey of graduates

Table 10 Routes towards employment (always worked or re-entered the labour market), according to type of university degree and family social status - in percent of the total

Status	Humanities	Law	Engineering
low	48	56	95
medium-low	82	74	94
medium-high	99	83	96
high	100	100	96

Source: Isfol, EVA surveys of graduates

Table 11 Percentage of low-status young people in routes in and out of the labour market

	Humanities	Law	Engineering
has always worked	9.3	24.5	20.7
never entered			
the labour market	58.6	45.7	17.1
worked, withdrew			
and re-entered	24.3	23.6	16.6
worked and withdrew	48.8	41.9	20.0
sample low social status	22.1	31.1	20.1

Table 12.1 Professional position according to social status, humanities graduates

	Low	M-low	M-high	High
entrepreneur	1.1	0.8	1.6	10
lib. prof.	17.9	14.3	18.2	10
other	0.6	1.3	1.1	
manager	1.7	2.7	5.8	10
executive	3.9	18	17.6	20
employee	73.7	60.8	55.6	50
worker	1.1	2.1	1.1	

Source: Isfol, EVA surveys of graduates

Table 12.2 Professional position according to social status, law graduates

	Low	M-low	M-high	High
entrepreneur			0.6	
lib. prof.	3.8	4.1	7.5	42.9
other	2.3	4.1	3.5	
manager				
executive	4.5	16.9	17.9	28.6
employee	85.9	81.7	66.7	28.5
worker	5.5	3.1	5.4	

Source: Isfol, EVA surveys of graduates

Table 12.3 Professional position according to social status, engineering graduates

	Low	M-low	M-high	High
entrepreneur	3.8	2.3	11	0.4
lib. prof.	27.5	21.3	14.4	17.0
other	1.7	2.3	1.1	1.3
manager	5.0	7.0	6.0	8.0
executive	57.0	53.1	67.4	72.3
employee	10.0	12.0	10.0	10.0
worker				

Source: Isfol, EVA surveys of graduates

Table 13 Graduates' entrance and withdrawal flows according to father's occupation

	self-empl. entrepr.	other self-empl.	manager	executive	employee	ordin. employee
entrepr./professional	63	127	7	44	23	23
other self-empl.	34	75	5	66	22	25
manager	13	53	6	41	13	12
executive	16	46	29	8	10	
employee	14	44	3	7	57	72
ordin. empl.	64	134	11	98	42	72
worker	16	30	9	41	9	10
total	220	509	41	326	174	224
entrepr./professional	21.95	44.25	2.44	15.33	8.01	8.01
other self-empl.	14.91	32.89	2.19	28.95	9.65	10.86
manager	9.42	38.41	4.35	29.71	9.42	8.70
executive	14.55	41.82	0	26.36	7.27	9.09
employee	7	22	1.50	3.50	28.50	.86
ordin. empl.	15.20	31.83	2.61	23.28	9.98	17.10
worker	13.79	25.86	7.76	35.34	7.76	8.62
total	14.67	33.93	2.73	21.73	11.60	14.93
entrepr./professional	28.64	24.95	17.07	13.50	13.22	10.27
other self-empl.	15.45	14.73	12.20	20.25	12.64	11.16
manager	5.91	10.41	14.63	12.58	7.47	5.36
executive	7.27	9.04	0	8.90	4.60	4.46
employee	6.36	8.64	7.32	2.15	32.76	32.14
ordin. empl.	29.09	26.33	26.83	30.06	24.14	32.14
worker	7.27	5.89	21.95	12.58	5.17	4.46
	0	0	0	0	0	0
total	100	100	100	100	100	100

Source: Isfol, EVA surveys of graduates

Table 14 Income levels earned for graduates of humanities, law and engineering

Degree	Low		M-low		M-high		High	
	> 25	< 25	> 25	< 25	> 25	< 25	> 25	< 25
Law	99.1	0.9	72	28	39	61	0	100
Humanities	100	0	75	25	61	39	0	100
Engineering	78	22	73	27	72	28	68	32

Source: Isfol

The training and occupational routes of new university graduates in Catalonia

This presentation describes some of the results of various studies conducted within the Institute for Educational Science of the Autonomous University of Barcelona (AUB) of relevance to the theme of the Barcelona conference.

Our information is based on two different sources: firstly, two sample studies on the insertion of new university graduates throughout Catalonia in the specialized fields of economics, business and law (class of 1988) and chemistry, psychology and information science (class of 1987), in both cases the respondents being surveyed three years following graduation (1), and secondly the initial findings from the observatory recently established by the AUB to follow up its own students in the specific form of data on the roll of academic year 1992-93 and those who completed their studies in September 1992.

1. The general context

First of all, some general indications on the period under review to place the following in its overall context.

The university system of Catalonia went through a period of expansive dynamism in the 1980s, chiefly in scientific/technical and social disciplines, above all in business studies, whereas a much lower growth rate was recorded in the humanities field.

The highest unemployment rate in the period under review was recorded in 1985 and the lowest in 1990 when the dole queues lengthened again, in particular towards the end of 1991. In general, unemployment rates among graduates of higher education run parallel to those of the overall working population, but always several percentage points lower. The highest levels of forced unemployment are found among humanities graduates (both short- and long-term cycles).

This period shows a relative decline in the percentage of university graduates holding professional and technical-level jobs and a corresponding considerable increase in the percentage of graduates working in administrative and related jobs which are of less level of qualification.

2. Pre-university training paths

Less than half of Spanish students reach university without repeats in the course of secondary education.

Spanish legislation provides for three routes of access to university: (i) the "normal" route on the basis of the bachillerato (academic secondary education) and the university foundation course (approx. 85%); (ii) a set quota for those coming up from the vocational education stream (10%) for a number -of short-cycle disciplines related to the relevant field of vocational education only; and (iii) a special route for those aged 25+ following a specific entrance test (5%).

It is important to note that less than one half of those reaching university via the first route do so without repeats in secondary Education; one of the objectives of an observatory on

university performance must therefore take these differences in access into consideration. It should also be pointed out that approx. 5% of the total have entered via the 25+ route, and over 15% have interrupted their educational paths for some reason, either to work or because they were not accepted for the discipline of their choice due to a lack of places.

Those students whose paths are characterized by repeats at secondary level or breaks in their education are not spread among the various disciplines at random but tend to concentrate in certain fields more than in others - which logically impacts upon the final results. In the same vein, it is of interest to note that the system of access to our university on the basis of limited places and a numerus clausus means that certain disciplines, especially in the humanities field, are occupied by students who are not directly interested in the degree in question.

3. University paths and insertion into the labour market

The profiles of university students in terms of organization of the time spent at university and the time devoted to university studies is not particularly commensurate with the theoretic model of a student. Meritocratic criteria do not determine good occupational insertion .

In all the degree courses analysed we observed that students take considerably longer to conclude their courses than the set time frame and very often link studies with some form of remunerated employment. The profile of a full-time student is most frequently found in the sciences, but even here the latest data seem to indicate an increase in those students working for half the day.

Although studying full-time normally has a positive impact on a student's academic record, it does not necessarily have the same effect at the level of good occupational insertion. In actual fact, although it may be a good occupational insertion strategy to study to get good grades, positive insertion results may also be achieved by early entry into the labour market in a job related to the course of study.

As indicated in the general remarks above, of all university subjects, the main insertion difficulties, especially in terms of adequate insertion, are to be found in psychology and information science (which, although formally belonging to social sciences, is very close to the humanities field).

4. Short- and long-cycle university degrees in relation to insertion

It is not easy to distinguish the difference in skill levels in the work of long-cycle graduates on the one hand and short-cycle graduates on the other.

This statement is merely a working hypothesis since we still have very few data on this subject; it must also be taken into consideration that the context is insertion only three years following university exit. Moreover, it is difficult to measure the skill level required for tasks at a certain level on the basis of a questionnaire.

In the light of our data and a comparison of economics and business studies graduates, on the one hand, and chemistry graduates and chemical/technical engineers, on the other, we have concluded that it would be very difficult to maintain that long-cycle university graduates perform tasks involving a higher degree of occupational skilling for which more preparation is required. The reference here is of course to the world of private enterprise in which there are no regulatory limits on the hiring of graduates who have followed short- or long-term degree courses and where the only difference we found concerns remuneration, lower in the case of short-cycle graduates and provoking a higher level of job dissatisfaction.

5. Motivations in the choice of university course

The subjective motivations given by students as determining factors for their choice of university course differ significantly according to the type of university studies.

In Spanish universities the numerus clausus system and the selection of candidates on the basis of their academic record during secondary education and the university entrance test result in the concentration of a high number of students in certain courses which are not their first option; this to a certain extent distorts the brief analysis of motivations below. In any case the bias which this entails is not relevant at the level of generality in the present context in which we are seeking to highlight the most significant and comparable factors.

The overall motivations given by students may be summarized according to three basic categories:

First of all, those who enrol in a given course because they believe it holds job prospects and therefore offers more or less rapid insertion into the labour market. The courses chosen by these students in descending order of the percentage of replies giving this motivation are: business administration and management, economics, computer science, business studies, technical management engineering, advertising and public relations, translation and interpretation, law, physiotherapy, nursing, chemistry and statistics.

The second major motivation of students to enrol in a given university course is the wish to be - i.e. to have a job - of use to society. The subjects chosen on these grounds are: social education, medicine, nursing, psychology, educational science, primary education, political science, physiotherapy, veterinary medicine and sociology.

And finally, the third reason motivating students to opt for a particular course is simply the wish to deepen their general knowledge. The courses chosen by these persons are as follows: philosophy, history of art, Catalan philology, history, Spanish philology, sociology, geography, classical philology, political science, English philology, journalism and psychology.

* * *

The results of our research - of which we have only highlighted those which seem most relevant in the context of this international conference - undoubtedly hold wide-ranging implications which should be taken into account in the framework of the current process of reform of Spanish universities. We hope this will be the case.

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CEDEFOP - European Centre for the Development of Vocational Training

The Determinants of Transitions in Youth

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The occupational and social integration of young people has been analyzed frequently but at present such integration is faced with high unemployment, an aggravation of "exclusion" phenomena and changes in the production and employment systems. The conference shed light on the various factors which influence the social and vocational integration of young people and on the different approaches to the issue in a number of European countries.